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THE NEW YORK

TREATISE

ON

WOMEN AND CHILDREN

AND

THE

POPULAR DIRECTIONS
FOR THE
TREATMENT
OF
The Diseases
OF
WOMEN AND CHILDREN.

BY
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POPULAR DIRECTIONS

FOR THE

TREATMENT

OF

THE DISEASES

It is the wish of the Author to have this work
intention to encourage the public mind

WILLIAMS AND CHILDREN, 10, N. B.

nothing but the best and most reliable

the skill of the physician, and the

the most reliable and most reliable

BY

General JOHN BURN, M.D., F.R.C.S.

Printer on the subject, and the most reliable

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A. Duncan, Printer to the University
of Glasgow.

PREFACE.

IN this work, it has been far from my intention to encourage unprofessional readers, to undertake the office of prescribing for diseases, which often baffle the skill of the most experienced practitioner. But there are situations, in which a little medical knowledge, or a general acquaintance with the most frequent complaints, incident to women and children, may be of essential consequence to the comfort, or even the life of the patient, before regular assistance could be procured. Such knowledge is also highly useful, on the one hand, in preventing unnecessary apprehension, respecting symptoms by no means dangerous, and on the other, in

giving timeous alarm, where delay might be injurious, or fatal.

For these purposes, I most sincerely hope, that the following pages will be found adapted. The reader is only to expect a general view of the subject. In my "Principles of Midwifery," I have treated the matter professionally, for the use of medical readers; but here, my object has been, to give an outline of the different diseases, with some instructions for their treatment, plain enough, I hope, to be understood, yet not so minute, as to bewilder those readers, for whom they are intended.

In the course of this work, I have in particular cases, mentioned the composition of medicines, and the precise dose to be given. In others, I have merely spoken of them in general terms, and therefore, it will be necessary to premise the following few directions, respecting the quantity of medicine to be given.

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ERRATA.

SOME typographical errors have crept into the work, but it is hoped, that they are not important, and may be discovered by the context. The following have been observed, and the reader is requested to correct them with the pen.

Page	4.	Line	11.	For <i>The</i> , read <i>These</i> .
—	27.	—	6	from the bottom, for <i>By</i> read <i>R</i> .
—	—	—	10.	from the bottom, for <i>By</i> , read <i>R</i> .
—	32	—	5.	from the bottom, for <i>By</i> , read <i>R</i> .
—	58	—	4.	from the bottom, for <i>Syrp</i> , read <i>Syrup</i> .
—	116	—	12.	for, or the pain, read, or of the pain.
—	—	—	14.	for, inflammation is excited, read inflammation of the breast is excited.

POPULAR DIRECTIONS,

&c.

PART FIRST. *OF PREGNANCY.*

CHAPTER I.

Of the Signs of Pregnancy.

IN laying down directions for the management of pregnant women, I shall begin by pointing out how they may safely arrive at their full time, or prevent a miscarriage, and then I shall proceed to shew by what means the disorders attending pregnancy may be relieved. It will be proper, however, previously to notice those signs or symptoms which indicate that a woman is with child.

Some feel very soon after conceiving, such an alteration in the state of the stomach, or in their sensations in general, as apprises them of their situation. But usually the earliest intimation is afforded by the obstruction of the monthly discharge. This is an invariable

effect of conception, for although a few women have, in the early part of pregnancy, a shew of menstruation, it yet is by no means regular in point of time, or of duration, or of quantity, neither is it in general attended with the usual symptoms. Obstruction, however, it must be recollected, may take place from other causes; hence, though we conclude that she who is regular is not pregnant, we cannot infer, to a certainty, that she who is obstructed has conceived.

Very early after conception the stomach is affected, the woman is troubled with heart-burn, acidity, want of appetite, or disgust at her usual food, and sometimes has a craving for things she formerly did not desire. She is usually sick in the morning, and generally vomits after she gets up, though some have no sickness till the afternoon. Sudden qualms and feeling of faintness, with or without an inclination to reach, occur at different times through the day. The bowels also, generally become bound. Some, instead of being sick, or in addition to the fits of sickness, are troubled with a constant desire to spit, with toothach, water-brash, cough, nettle-rush, or other affections. But the degree to which these extend varies, as well as the period at which they take place.

After conception the breasts often become

rather smaller, but by the third month they evidently enlarge, the nipple is surrounded with a brown circle, and presently a milky fluid can be pressed out.

The belly usually becomes at first somewhat flat, but very soon it increases in size at the lower part, and augments as pregnancy advances. The navel becomes prominent.

About the end of the fourth month, or a little sooner or later, in different cases, the motion of the child is perceived, and this is the most satisfactory of all the signs; but those who are anxious to think themselves pregnant, when they really are not, are apt to mistake wind, passing along the bowels, for the motion of the child. The motion is at first gentle, it is felt pretty low, and resembles a gentle fluttering. The sensation is peculiar, and not unfrequently is at first accompanied with sickness, faintishness, or hysterical affections. It may be felt by night or by day, and may either be repeated pretty regularly, or may not be again observed for two or three days. It is called quickening, not because the child at this time begins to live, for it is alive from the first, but because it can now move, or its motion is not till this time perceptible. After this period the morning sickness and loathing of food usually go off, or at least greatly diminish.

The complexion generally suffers in pregnancy, and the features are affected in the same way as in children who are troubled with worms. There are, however, instances, on the contrary, where the looks are greatly improved, particularly after the fourth month.

In some cases the pulse continues at its ordinary rate, but more frequently it becomes quicker, and blood drawn during pregnancy is, in almost every instance, sily.

~~The~~^{These} different signs usually enable a woman to judge early of her situation; but, when she is in any doubt, the period of quickening dispels it. An experienced midwife can also judge from the changes produced in the womb itself, but such examination is neither proper nor necessary, except under peculiar and important circumstances.

A woman in good health may accidentally be obstructed for one or two periods, but in this case the other signs of conception are usually absent, and at all events, prudence will dictate the necessity of patience till the fourth month. In bad health the courses are often stopped, but in such circumstances the appearances of pregnancy are absent, whilst the symptoms of the accompanying disease point out the nature of the case.

There is a situation in which there may, for a time, be some ambiguity, and that is,

where the woman has actually conceived, but the embryo has almost immediately perished, yet has not come away, but, together with some blood in the womb, is converted into a pretty firm but shapeless mass, called a mole or false conception. This may also proceed from a clot of blood without pregnancy. It even in that case is generally attended with sickness, enlargement of the breasts, and other signs of conception, but the belly increases faster, is softer and more variable in this than in pregnancy, being sometimes as large in the second month of the supposed, as it is in the fifth of true pregnancy. The mole may be retained for a few weeks, but rarely beyond three months. If it be retained long it is usually converted into a substance, containing a great many little bladders, filled with water, which are called hydatids. The false conception is expelled with symptoms similar to those which attend abortion.

CHAPTER II.

Of Abortion, and the means of preventing it.

THE child, along with a considerable quantity of water, is inclosed in a membranous bag, which is contained within the womb, and connected to its surface by innumerable vessels. These vessels are at one part very large, and enter into a thick soft substance, called the placenta, or after birth. From this the child is nourished and supported by means of the navel string which is attached to it. If any part of the membranous bag, or of the placenta, be separated from the womb, the vessels must be torn and blood will flow from them. If the injury or separation be extensive, there is not only a very considerable discharge, but both the child and the womb suffer so much that a miscarriage takes place.

Abortion is always accompanied with two circumstances, separation of the membranous bag, and expulsive efforts, or contraction of the womb itself. The first is productive of discharge, the second of pains like those of labour. Sometimes the separation or detach-

ment of part of the conception takes place before any pain is felt; on other occasions the pain or contraction of the womb takes place first, and produces a separation. In the first of those cases, the abortion is usually occasioned by fatigue, a sudden exertion, a fright, &c. and the symptoms take place suddenly and without much previous warning. In the second, the child is frequently dead for some little time before the pains come on, and there are particular feelings and changes which indicate that a miscarriage is likely to take place; as for instance, the cessation of the morning sickness, the subsidence of the breasts, absence of motion of the child, a feeling of weight or heaviness in the lower part of the belly, &c.

When abortion is going to take place, the patient feels pain in the back and lower part of the belly, with uneasiness like colic, and a sensation of slackness. This state if it has not been preceded, is soon followed by a discharge of blood, and presently regular bearing-down pains are excited. The discharge is sometimes from the commencement red and profuse, but in other cases it is at first rather watery, or sparing in quantity; presently it flows more copiously, and considerable clots come away, and often pieces of skinny or fleshy looking substance may be

discovered. In some cases there is much pain and little discharge, or the reverse may happen, or both may be considerable and protracted. If the miscarriage take place at a very early period little can be detected except clotted blood, but if every thing be put into a bason of water we can sometimes observe a more solid substance like a chesnut, which when examined contains a small bag of water with a child in it no larger than a bee. If the third month be entered into or completed, then we find that the whole conception comes away at once, like a bag covered with fringed vessels; or if the bag burst before it comes away, a gush of water takes place; by and bye the child is expelled, and in some time afterwards the placenta comes away. Abortion is sometimes preceded by shivering, and attended with great pain and a feeling of sickness or sinking about the stomach, or a tendency to faint; occasionally the patient is greatly troubled with wind in the stomach or bowels. But the attending symptoms are not exactly the same in every case, and the duration of the process is variable and uncertain. In some instances the whole is over in less than six hours, in others it is protracted for many days.

It is possible for a woman who has con-

ceived twins to part with one child and keep the other.

Women are more subject to abortion, during and before the third month, than after the time of quickening.

Now when a woman is threatened with a miscarriage, there are two objects to attend to; the first is to prevent it if we can; the second is, if that cannot be done, to manage it so that as little blood as possible be lost, and these are fortunately obtained both by the same means. This leads me to repeat, that abortion either comes on suddenly and without any long warning, or we have some time before, a diminution in the size of the breasts, whilst the morning sickness goes off, and the motion of the child, if it had taken place, stops. These symptoms shew that the child is dead, and therefore miscarriage, so far from being dreaded, should be considered as a fortunate event. But if we have had none of those signs, but abortion is threatened in consequence of some accidental cause, such as a long walk or a fit of passion, then we certainly would wish to avoid it. If we have merely an aching pain in the back, or a kind of colic in the bowels, with a very trifling discharge, we may hope to stop it; but if the pains be regular and bearing-down, and the discharge copious, and especially if, at the

same time, any water have come away, or any portion of skinny looking substance, there is no expectation of checking it.

No woman ought to trust to her own management, or the skill of her nurse alone, during abortion. But, notwithstanding this, it may be proper to give some useful rules for her conduct.

The first direction is, that she immediately, on the first alarm, undress and go to bed, with a firm determination not to rise till the process be either completely checked, or completely over. There should be little, or rather no fire at all in the room though it be winter, and if it be summer, the windows must be opened. The bed-clothes should be few, and the drink cold and taken in small quantity; the diet is to be low, and every thing stimulating is to be avoided*. Cloths wet with cold water, should be applied to the lower part of the belly and back. The reason of all this is, that heat, motion, and stimulants increase the circulation of the blood, and con-

* Panado, arrow root, dry toast, rusk biscuit, or vegetables with little liquid, constitute a proper regimen, unless the process be protracted, and the strength much impaired; in such a case the diet may be more liberal, and the light kinds of animal food, such as boiled chicken, are allowable, or calves feet jelly is proper. In every case ripe fruit is safe and useful.

sequently the discharge. Hence is evident the impropriety of giving port wine with a view to stop this; it in the early stages really increases it.

A second direction is, not to be hasty in removing that feeling of sinking or faintishness which often comes on early; for this is a mean employed by nature for moderating the discharge. Cordials are only proper when given prudently by a practitioner. If the feeling of languor or sinking in the commencement of abortion be troublesome, a little peppermint water, or a few drops of aromatic spirit of hartshorn will be useful.

A third direction relates to blood-letting. Many have recourse to this indiscriminately, in every case. When the pains are regular, and the discharge copious, there is no chance of preventing abortion by this mean, and therefore it cannot be employed in this view, nay it even sometimes seems to hasten the expulsion of the child. But if the pains be trifling, and the discharge moderate, and the symptoms have been brought on suddenly by some such cause as a fall or exertion, then if the pulse be not feeble it will be very proper, and should be followed by the administration of twenty-five drops of laudanum; or what is better, by a clyster made of a cupful of starch and a tea spoonful of laudanum, which should

be retained as long as possible. Opiates are useful in every case where we hope to prevent abortion, and must be repeated oftener or seldomer, according to the effects they produce and the good they do. They are, however, seldom required, and very generally improper in those cases where miscarriage must decidedly take place. Their tendency to occasion costiveness must be obviated by the use of some gentle laxative, such as calcined magnesia or a little castor oil.

A fourth rule is, that if by any of these means the symptoms be checked, the woman is on no account to rise for some days; and should they continue to be tedious, she is to be confined during the whole time, as motion will infallibly make them worse. If there be a continued but trifling discharge, great advantage may be derived from injecting, three or four times a day, a solution of alum, by means of a small syringe. Indeed, in all protracted cases, this is of much benefit. The solution ought to be thrown up pretty high that it may reach the womb.

Fifthly. If the whole conception come away at once, the pain and discharge usually go off, but if only the child come away, all the symptoms either continue and increase till the after-birth come away, or if they be for a time suspended they are sure to return.

Sixthly. If the discharge at any period be very profuse, and do not stop on the application of cold to the lower part of the belly, it will be proper to press firmly a soft cloth or handkerchief into the passage to the womb, which will retain the blood, make it clot, and thus fill the mouths of the vessels and stop them. Should the discharge be copious, and the after-birth be retained long after the child is expelled, some means must be used for removing what remains.

Seventhly. After the process is over, if the woman do not keep her bed for some time, and be very careful to avoid fatigue, a troublesome discharge is produced, which both adds to the present weakness, and also makes abortion more apt to take place again. This is cured by elixer of vitriol, bark, and the cold bath, with gentle laxatives.

Eighthly. After all is over, means must be used for restoring the strength. The diet must be light but nourishing, and a moderate proportion of wine allowed, if it do not heat the patient, or produce pain in the breast, or cough. The bowels are to be kept regular. Sleep, if necessary, is to be procured by opium or hyocyamus; and as soon as possible the cold bath should be employed. If the woman be of a delicate habit, she is apt to become consumptive, if the strength be not

soon restored, or she may remain obstructed for several months. A removal to the country and a milk diet are highly proper, and in such cases often cure the dry tickling cough and night sweats, which accompany the debility thus excited.

In a work of this kind it will be more useful to give directions for the prevention, than for the management of abortion. All women are liable to this misfortune, but some are peculiarly subject to it, and have it produced by very slight causes.

A miscarriage may be produced by any cause which can separate the conception from the womb, or tear some of the vessels, going from the one to the other. Hence it is often brought on by fatigue, dancing, sudden exertion, a fall, violent coughing, or vomiting excited by medicine, or passions of the mind, which hurry the circulation and agitate the system of the woman. It will also be caused by any thing which can directly irritate the uterus or any of the organs in its neighbourhood, and hence bowel complaints, or strangury, produced by keeping on a blister too long, may cause it. Circumstances immediately affecting the contents of the womb often cause abortion, such as the accidental rupture of the bag, which incloses the child, and the consequent escape of the wa-

ters; or some causes operating on the child, and destroying it. Medicines which are violent in their operation, or of a very stimulating quality, or diseases which are attended with great pain, or productive of much weakness, may cause abortion.

There are, however, certain constitutions in which those causes operate more readily than in others, for some bear all manner of hardships, or intentionally use means to destroy the child, and yet do not miscarry; whilst others do so if the door be closed quickly.

There may be certain states of the womb itself, and some other circumstances which cannot be here explained, which dispose to abortion. The child itself may be so feeble and delicate from the first, as to be incapable of living till near the full time, or the vessels which connect the child to the womb may be diseased, and cease to convey sufficient nourishment. But the most evident disposing causes of abortion are the following. First; Too much blood, marked by a very copious monthly discharge, which continues beyond the general number of days, and is often met with in a full habit of body. When this exists to a considerable degree the pulse is full but sluggish, and sometimes the skin is flabby or puffed up, or loaded with fat.

Second: A very irritable constitution, the woman being easily fluttered, the pulse is readily quickened, and she is subject to palpitation, starting, and hysterical affections. Third: A considerable degree of weakness and delicacy of the whole body, so that the womb, like every other part, is unfitted for carrying on uniformly its functions. The different causes may be combined in different degrees.

Now the first direction to be given is, to remove that condition which is found to dispose to abortion in particular instances. If the patient belong to the first class, and have too much blood, she should put herself on spare diet, and on vegetable rather than animal food, she should avoid malt liquor, take some gentle laxative, the best of which is rochelle salt*, use moderate exercise, and for invigorating the functions, which are oppressed, she ought to take the cold bath daily. If the bath produce a headach with a sense of tightness or fulness in the head, it must be omitted, till by laxatives or sometimes by

* Four ounces of the salt may be dissolved in a quart bottle of water, and a tea cupful, or more if necessary, taken every morning two hours before rising, till the fulness be reduced. One, or at most two loose stools are sufficient daily. Much and long continued purging may ruin the constitution.

blood-letting the fulness be diminished. It will then agree with the patient. This treatment is proper before conception, but when she is pregnant then the exercise must be taken with circumspection; she ought to continue the cold or shower bath, keep the bowels regular, avoid much fluid of any kind, especially malt liquors or wine, be bled occasionally, particularly if she feel aching pain in her back, and continue upon rather spare diet.

If she be very irritable and easily fluttered, it will be necessary to employ such means as diminish this state, particularly gentle laxatives, the cold bath, in the sea, if possible, strengthening medicines, such as preparations of iron, and if the irritability be great, the camphorated julap.

If she be of a feeble delicate constitution, the cold bath is proper, provided it do not make her chilly afterwards; if so, there must be as much warm water added, as makes it of summer or Buxton heat. Elixir of vitriol, bark, or a moderate proportion of wine, and nourishing diet, will be proper.

Second. After a woman who is subject to miscarriage conceives, it will be proper to continue our attention to the constitution, and use means for diminishing the tendency to abortion. The cold bath is of signal ser-

vice in every instance, where it is not followed by chillness. I have derived so much benefit from it in my practice that I cannot speak too highly of it. Blood-letting is also of great service in every case, except when the constitution is feeble, which was the third state I mentioned. Here the pulse is small and weak, the patient delicate, and the general strength little. In all other cases, when abortion is dreaded, blood-letting is of service, but the blood should be taken from a small opening and not much at once, lest the woman faint. It is better to repeat it occasionally. Sometimes we take only one cupful, but repeat it every fortnight or three weeks, during the second and third or fourth months; at other times we take two cupfuls at once, or even more, and do not repeat the bleeding afterwards. The quantity taken and the repetition must depend on the constitution of the patient, on the particular symptoms in the individual, and on the effect produced by the evacuation. As there would appear to be a greater tendency to miscarry about the return of the monthly periods than at other times, it is proper to bleed a day or two before the completion of the month. If the patient be very plethoric, and has formerly miscarried early, we bleed about the 6th or 7th week; if not, we delay till towards the

end of the third month. When the woman, on the other hand, is weak, blood-letting is hurtful, and strengthening medicines, with rest, are most proper.

Third. Every woman whenever she knows herself to be pregnant ought, especially if she has formerly miscarried, most carefully to avoid those causes which are ascertained to be capable of producing abortion, such as carrying a heavy child, taking a long walk, dancing, stooping much, or reaching high, every kind of exertion or fatigue, strong purges, running quickly up stairs, sitting long in a constrained posture, heated rooms, sudden surprises, &c. Indeed, from the inattention of women to these causes, and their neglect of them till they have produced their effect, it might be necessary to specify them as minutely as our lawgivers do contraband goods, in a bill against smuggling.

Fourth. Whenever any disease takes place, capable of producing abortion, immediate means should be used to remove it. Hence cough, bowel complaint, &c. ought never to be neglected.

Fifth. Those who are peculiarly apt to be startled, or who are nervous, ought carefully to avoid such situations as may be likely to expose them to agitation.

Sixth. Those who are subject to abortion should sleep alone till after the third month.

Seventh. If a woman who is liable to miscarry without any evident cause, ceases to be sick in the mornings, and the breasts fall away for some time before the symptoms come on, it is necessary to use such means as the state of the constitution points out, and which have been noticed above, in general the cold bath and the invigorating plan, and to redouble our care at a very early period. In some instances though we fail once or twice, owing probably to some defect in the action of the womb, or peculiar condition of the child, we may ultimately succeed by perseverance.

Eighth. If children are born from the sixth to the eighth month dead, and covered with bloatches, and without the skin, and especially if this happen repeatedly, it will be proper to have advice how far the parents should take some internal medicine.

Ninth. In every instance, on the very first appearance of symptoms of abortion, or of any peculiar feeling in those who are subject to it, the woman ought to go to bed, and prompt measures must be employed to prevent the continuance of the symptoms.

Tenth. All women miscarry more frequently in the second or third month, than at any other time, but some have a certain period

at which they usually go wrong, and do not vary a week from it. In all such cases our care must be increased at that time, and in some instances it is necessary to confine the woman to her room, or even very much to bed till that period be past. After the fourth month women miscarry more rarely.

It may not be improper, before concluding this chapter, to take notice of the tendency which some have to bear dead children between the sixth and ninth month. Children are born dead under two different circumstances; either there is no unusual quantity of water in the womb, or there is much water, and the woman is perhaps as large in the seventh as she ought to be in the ninth month. When there is no extraordinary bulk the child may be born dead, in consequence of any of the general causes producing abortion, operating at an advanced instead of an early period; but it may also proceed from some disease of the child itself, occurring either accidentally, or in consequence of some complaint of the parent. When there is an enlargement, the death of the child proceeds from a disease of the whole ovum or conception, existing, in all probability, from the earliest date. The motion of the child is felt first of all to become weaker and more obscure, and then it

ceases altogether for some time before labour comes on. This complaint requires much attention to discover the cause and the remedy; it may, and certainly in many cases actually does proceed from an infirmity in the constitution of one or both parents, and I have little hesitation in saying, that if, in spite of attention to the general rules laid down above, the woman continues to bear dead children, we ought, whether the child have bloatches or not, whether it be fresh or putrid, to put the parents under a prudent course of mercury, as being the most effectual remedy. I must also add, that it is consistent with my experience, that the state, whatever it may be, which gives rise to this calamity, seems sometimes spontaneously to decline. For a woman may, without any peculiarity in the treatment, bear in successive pregnancies her children a month later each time, and they shall be successively first dead, then alive but so weak as to live only a day or two, and then more robust. It is also a fact, that like some hereditary disease, this state shall operate upon one child and not on another. Thus, of four children, the two first and the fourth may be dead, whilst the third is alive and healthy.

Some diseased states of the constitution, not much under our command, may also oc-

casion the birth of dead children, which are likewise sometimes much deformed. Scrophula and lunacy seem occasionally to have this effect.

When a child dies, the breasts become smaller, the belly ceases to enlarge, and no motion is felt. It must, however, be recollected that in some instances very little motion is felt during the whole of pregnancy, although the child be healthy; and in other cases the motion ceases for some days, and the breasts fall off, but in a short time they again enlarge, and presently the child is felt to move.

CHAPTER III.

Of the Diseases of Pregnancy.

PREGNANCY produces several changes in the system, many of which are attended with more or less inconvenience. This is not to be wondered at, when we consider that the womb, which was formerly very small, comes to augment so as to contain at last a large child, and that from the first it becomes necessary to support and nourish both the child and the increasing womb.

SECTION I.

The stomach, in most cases, very early becomes affected, the woman being troubled with heart-burn, sickness, acidity, disgust at food, vomiting, or pain in the stomach.

Sickness and vomiting are most frequent immediately after getting out of bed, hence the name of "morning sickness;" but in some cases they do not come on till the afternoon, and continue till night. Some women are sick immediately after conception, but in general this does not take place for one or two

weeks, and goes off about the time of quickening. Some are never sick, others are sick the whole day, and for many months. The matter thrown up is either glary or bilious, or consists of the food and drink. Sometimes it is vomited easily, in other instances not without very considerable retching. Some are sick for many weeks, whenever they are out of bed; others are well during the day, but awake through the night, sick, and very much distressed with water-brash.

When the complaint is moderate no remedies are required; it is sufficient to keep the bowels open; but when it becomes troublesome, and occurs through the day, and the woman vomits after eating, it is necessary to interfere, lest by continuance it become intractable. The most effectual means of relief are blood-letting and gentle laxatives, regularly administered. If it be so frequent as to keep the person from eating, three or four leeches applied to the pit of the stomach are highly useful. Soda water either checks the retching, or makes the woman vomit easily. Laudanum does no good, but often harm, at least if taken by the mouth. It may be rubbed on the pit of the stomach, or sometimes may be given as an injection, when the vomiting is constant; for this purpose a tea spoonful should be mixed with a cupful of

thin starch, and it is to be retained as long as possible. Lemonade, saffron tea, chamomile tea, bitters, elixir of vitriol, tincture of castor, &c. have also been tried, but cannot be depended on. In some cases the vomiting is so continued and severe, that it becomes necessary to support the strength with clysters of beef tea. It is remarkable, that although the retching be violent it rarely produces abortion. In the end of pregnancy, vomiting is sometimes caused by the pressure of the womb on the stomach. The woman must in this case eat little at a time, and often keep pretty much in bed, preserve the bowels open, and she may take at bed time ~~three~~ grains of extract of hyocyamus, but if this do no good at first, it is not to be repeated.

SECTION II.

Heartburn sometimes does not take place till after the period of quickening, but in general it comes on very early, nay some are tormented with it from the moment of conception till some days after delivery. It is often most distressing in the mornings, or about an hour after taking food, but in some cases it is seldom absent; in others it gives little trouble through the day, but comes on with great severity during the night, and at

last produces vomiting of a very hot and sour fluid. Magnesia is the usual remedy, or when the bowels are rendered too open by that, prepared chalk is used. When it is very distressing, and the patient is of a full habit, blood-letting is often of service. The bowels ought always to be preserved in a regular state. When it is not relieved by the common absorbents, a combination of calcined magnesia, with pure ammonia may be tried*. Bitter infusion, bark, elixir of vitriol, &c. have been employed, but with very little advantage. Dr. Denman, and some other practitioners of great reputation, have proposed emetics when the woman had much phlegm; but from the risk of these remedies producing abortion, they ought never to be given without the greatest caution, nor can I conceive that a single emetic should remove the tendency to heartburn. Gum arabic or refined liquorice sometimes are of use.

* By *Magnesiae Calcinatae*,
Aquæ Ammoniacæ puræ, aa. ℥i.
Aquæ Rosarum. ℥vi M.

or,

By *Magnesiae Calcinatae*,
Spt. Ammon. Aromat. aa. ℥i.
Tinct. opii Ammon. ℥i.
Aq. Font. ℥iv. M.

Of either of these a table spoonful may be taken when the heartburn is troublesome.

SECTION III.

Some women have the appetite greatly increased during pregnancy, others have it diminished, but still more frequently it becomes fastidious, the patient being subject to loathing at particular things, and craving for others. It has been proposed to remedy this state, by tincture of castor or other remedies; but the best way is to indulge the inclination, and let the person eat when she pleases, and what she pleases, nor has any bad consequences ever followed from this, unless the inclination be placed on something very indigestible. Generally the desire lies to vegetables or light food. The mind like the body sometimes becomes more irritable or variable during pregnancy, and the desires are changeable, or placed on outré objects. These longings, as they have been called, whether they respect food or raiment, have been supposed to proceed from certain conditions of the child, who would be marked or otherwise injured, if they were not granted. Whether this doctrine was originally invented by some cunning dame, or whether it be, in defiance of jesters, a sober truth, I leave to the ladies to determine, but one thing is certain, that since the days of Peregrine Pickle longings have fallen into some disrepute.

SECTION IV.

Some are subject during pregnancy, especially in the first three months, to violent pain in the stomach or upper part of the belly. This is sometimes of the nature of cramp, the stomach feeling contracted like a ball, or the patient complaining of an agonizing twisting pain, often accompanied with retching and pain in the back, and contraction or hardness of the muscles of the belly, or cramp in the leg. It requires immediately a large dose of laudanum, with ether or peppermint water, followed by a saline injection, and the application of a mustard poultice to the pit of the stomach. After the pain has abated a laxative should be given. If it be attended with sourness in the stomach, a little hartshorn may also be given. Should cramp take place in the end of pregnancy, and be accompanied with great sickness, ringing in the ears, or giddiness of the head, and appearance of fire flashing before the eyes, blood-letting should be immediately had recourse to.

In some cases the pain is rather lower than the stomach, and darts through to the back. It comes in very severe fits, and when these go off there is still left a dull pain, which sometimes seems to spread over the belly.

The patient is sick, vomits, and during the pain the pulse is often slow; she is costive, the stomach feels choaked up, there is much wind, and the tongue is white. In some cases jaundice accompanies this. The complaint proceeds generally from the passage of gall stones. If the pulse be full and the constitution sound, it will be proper to take away some blood, apply fomentations to the part, and give a full dose of laudanum; or if this be thrown up, we give immediately a tea spoonful of laudanum, mixed with a cupful of thin starch as a clyster; after the pain has abated gentle laxatives are proper. It is worthy of notice, that those pains though severe seldom cause abortion.

SECTION V.

Jaundice consists in a yellow colour of the skin and white part of the eyes. The water is very red, and dyes a piece of linen of a yellow colour. It also deposits a brick coloured sediment, the patient is costive, and the stools are generally clay coloured. The appetite is impaired or lost, there is great listlessness, sickness, flatulence, and often an itching of the skin. It may take place in consequence of the passage of gall stones, and in this case is accompanied and preceded by very severe pains. It requires the treat-

ment I have just pointed out, and whenever the stone fairly passes, then the jaundice begins to go off. The reason why jaundice is not always an attendant on the passage of those stones is, that they are sometimes so irregular in their shape, that the bile can pass, although one of them be in the gall duct. A second case in which jaundice takes place, is when the liver is diseased, and this is attended with pain in the right side, increased on pressure, and often in the top of the shoulder, fulness about the stomach, hiccup or cough, &c. This requires the instant assistance of a practitioner. Jaundice may also occur very soon after conception, without any violent symptoms, and then seems to be connected with that particular state of the stomach attendant on pregnancy, together with some trifling obstruction to the passage of the bile, which is also sometimes secreted in an increased quantity. This is attended with little or no pain, and soon goes off, merely by employing gentle laxatives, such as cream of tartar. When a healthy woman, shortly after marriage, has this symptom, she ought to avoid all violent remedies, for the cure of jaundice, such as strong vomits and quack medicines, as they may cause abortion. Jaundice sometimes takes place in the end of pregnancy, owing, to the pressure of the womb on the

gall duct, but it requires no particular treatment, unless there be something more than mere yellowness of the skin. Brown patches, or other coloured spots sometimes appear during pregnancy, particularly under the eyes or about the mouth. They go off after delivery, and till then admit of no cure.

SECTION VI.

Costiveness is a common attendant on pregnancy, and if neglected may produce serious or troublesome consequences, such as piles, violent pains in the bowels, gripes attended with a great desire to go to stool, and the passage of a little thin slimy or bloody matter, miscarriage, &c. In many cases the quantity of magnesia taken for heartburn, or the use of a considerable quantity of boiled turnips or other vegetables in the diet, preserves the bowels open, but when this is not the case the common aloetic pill answers extremely well*. One or more of those should be taken

* When the common laxative pill is too weak, the following succeeds very well, and operates without griping.

By Aloës, ʒi.

Gambogiæ, gr. xxiv.

Ext. Cicutæ, ʒii.

Ol. Ment. Pip. gtt. x M. div. in No. xxiv.

One, or if necessary two, may be taken every night.

at night so as to procure a stool every day, unless in those constitutions where naturally a passage does not take place above twice a week, and where a daily stool produces sickness and weakness. If the bowels be neglected for several days, then, instead of taking those pills, or any other laxative, it is more prudent to give an injection of the thin part of barley broth, without any salt, and it should be kept as long as possible, in order to soften the contents of the bowels. It may even be necessary, if the stools have been long retained, and are very hard, to give a second of these injections at an interval of two hours, and then a dose of castor oil or rochelle salt, or a purging injection made with gruel, butter and salt. Were physic taken, without the previous use of an emollient clyster, great pain might be produced by its operation.

When costiveness produces griping pains, and the patient passes some thin stools, she is apt to be deceived, and consider the disease as a looseness; but she will find that this state is attended with a pressing or an inclination to go often to stool, she passes slime or blood, and small pieces of hard excrement along with it. This is to be relieved by the use of emollient clysters and gentle laxatives, in the way directed above, and after these have brought away the hardened stools, an injec-

tion containing laudanum should be given to allay pain, but next day a gentle dose of castor oil, should be taken to prevent costiveness; or sometimes it is necessary to give an opium pill, and alternate this with a laxative for some days. If any degree of fever, and continued or severe pain attend this state, blood-letting will be proper.

SECTION VII.

A looseness may occur during pregnancy, instead of costiveness, and in this case the stools are either of the natural colour but thin, and the tongue is clean, and appetite good: or they are very ill smelled, dark or brown coloured, sometimes watery, sometimes pitchy or bilious; the patient feels a bad taste, the tongue is white, and the appetite diminished. Now, in the first case it may, especially in the early stage of pregnancy, and if the woman be of a full habit, and feel a tension about the belly, be dangerous to check it suddenly. In such circumstances she should lose a little blood, and live on spare diet, which often moderates it; or if it continue after this, it can be kept in due bounds by an astringent mixture*. In the

* R. Confect. Catechu. ʒi.

Aq. Cinnam. ʒi.

Aq. Rosar. ʒiv M.

A table spoonful to be taken four or five times a-day.

second case, five grains of rhubarb may be given, with the same quantity of cinnamon, and prepared chalk, four or five times a-day, till the stools become more natural. Then an injection with laudanum may be employed, to ease pain and bring the bowels into a less irritable state. Soda water sometimes relieves the sickness, and the diet should always be light.

SECTION VIII.

Colic sometimes takes place during pregnancy, and irregular pains in the bowels, as I shall afterwards notice, are very frequent in the end of gestation. Abortion and extra-uterine pregnancy, a most uncommon occurrence, are often attended with colic. But the most usual cause is costiveness, or eating some flatulent food. The best treatment consists in giving a saline injection immediately, and afterwards thirty drops of laudanum, in half a glass of peppermint water; or if this be vomited, a clyster with laudanum should be given, after the operation of the common injection.

SECTION IX.

Piles are generally connected with a costive state. They consist of painful livid tumors at the extremity of the gut, sometimes very small, but often large, and surrounding it al-

most completely. These after some time may burst, and discharge more or less blood, and are then called bleeding piles. They also sometimes form in the inside of the gut, producing pain on walking or sitting long, but especially on going to stool. These are called inward piles, and may sometimes press forward to the passage to the womb.

The pain of piles is often very excruciating, and is attended with much heat, throbbing, bearing-down, and feeling as if the part would burst. If not relieved soon, they may in certain cases cause abortion, and if they exist during labour they always produce a painful delivery. The bleeding piles are less painful, but if the discharge be great, very disagreeable weakness may be produced, and other bad consequences may ensue.

It is necessary in every instance, to keep the bowels open by means of cream of tartar and sulphur, or small doses of castor oil. The diet ought to be light, consisting chiefly of vegetables; and cordials, such as wine should be avoided. The patient should recline on a sofa, and if there be any fever, or considerable irritation, blood-letting is often proper. If the pain be very great, the application of a leech to the most uneasy spot is useful, and afterwards the part should be

fomented with milk and water. Some liniments are also employed, but these are not always of benefit, nor is it easy to say before trial what will be useful. Cream mixed with vinegar, or with a little sugar of lead; or lard mixed with powdered galls, or with a small quantity of powdered opium, form good applications. In some cases cloths dipped in cold water, with a little sugar of lead are useful; in others, warm fomentations, with the addition of laudanum, answer better. Sometimes an injection, containing laudanum, gives relief. If the piles burst, and much blood be discharged, it must be stopped by compression,

SECTION X.

In some cases during pregnancy, there is great pain or heat in making water, with a frequent desire to pass it. This is often conjoined with a most troublesome itching at the neck of the bladder, and neighbouring parts, especially during the night, and is accompanied with a very considerable degree of fever, so that the nights are spent without sleep. This state requires blood-letting, and laxatives to keep the bowels open; and if there be much fever, the saline julap with

a little laudanum is useful*. If the itching be great, the occasional application of a sponge wet with cold water, gives temporary relief.

In the end of pregnancy there is sometimes an incontinence of urine, or the woman is obliged to void it frequently, but has no pain. This often proceeds from the pressure of the child's head on the bladder, and is considered as a favourable sign of a natural labour. It does not require any particular treatment. It may be mitigated by lying much on a sofa, and it is necessary to use the bidet frequently.

SECTION XI.

Another more serious affection is a great difficulty of passing the water, and ultimately an almost total suppression of it, at the same time that the stools are also obstructed. This is attended with much pain in the lower part of the belly, owing to the distension of the bladder, and a feeling of bearing-down, with a desire to go to stool. Presently the pain becomes more severe, and sometimes there is a strong and painful pressing, like

* R. Suc. Limon. ℥i.

Carb. Potas. q. s.

Syrp. Simpl. ℥ss.

Tinct. Opii, gtt. xxxvi.

Aq. Font. ℥ivss. M.

A table spoonful to be taken every hour.

the latter end of labour, and if this continue long, a swelling can be discovered at the back part of the passage to the womb, and sometimes this swelling descends pretty low. If the symptoms be still neglected, strong fever is excited, the bladder becomes inflamed and bursts, and the woman dies. This complaint consists in a change of the position of the womb, which is turned nearly upside down, and is brought on sometimes by a fall or sudden exertion, but much oftener by retaining the water too long. It chiefly takes place between the third and fourth month, and never in the advanced stage of pregnancy. Hence is evident the great impropriety of women, about that period, retaining their water long from motives of false delicacy or otherwise. The greatest danger proceeds from the state of the bladder, and therefore the first object is to have the urine drawn off, an operation which gives no pain, but which may be required to be performed morning and evening for some time. The rest of the treatment it is not necessary here to explain.

SECTION XII.

Some suffer much from a species of fever attending pregnancy. This may come on very early, but generally it does not appear till after the second or even the third quar-

ter. The pulse is frequent, the skin hot, the tongue dry, and the patient extremely restless, and sometimes troubled with an eruption like nettle-rush, or an uneasy itching of the skin, and occasionally with the pain in making water formerly noticed. The symptoms always become worse in the afternoon, and continue violent all night, producing much restlessness and distress. Towards morning they abate, and a little sleep is procured, but it is astonishing how little may be obtained for many weeks, and yet, except that the woman become thinner than usual, no great effect is produced by the want of sleep, and after delivery the recovery is as good as in other cases. The treatment consists in taking away a little blood occasionally, and preserving the bowels open; a small glassful of saline julap, taken twice or thrice in the evening, at the interval of an hour, is sometimes useful. The patient must sleep with few clothes, and often is relieved by grasping a sponge wet with cold water. The diet should be light. Laudanum gives no relief, but sometimes does harm. Patience is an admirable and effectual remedy.

SECTION XIII.

It is not unusual to find women very desponding, during pregnancy, with respect to the issue of their confinement. This pro-

ceeds sometimes from natural timidity, or from hearing of accidents befalling others, but in many instances it proceeds from a degree of melancholy, connected with the situation of pregnancy, which occasionally goes a great length, and produces much mental distress. The bowels are to be kept open, the patient should take gentle exercises, but above all, the mind must be kept employed, and cheered by some judicious friend, who with great truth may affirm, that her fears are without solid foundation.

SECTION XIV.

Fainting fits are not uncommon during pregnancy, especially about the time of quickening. They may attack suddenly without any evident cause, but oftener they are produced by some little exertion, or by too much heat, or by mental agitation. There is a great difference in the duration of the fit. It may last only for a minute, or for above half an hour. There may be only one attack, or it may be repeated for many days.

The patient is to be laid immediately on a bed, or the floor, if neither bed nor sofa be at hand. The window is to be opened, and cold water sprinkled on the face, volatile salt may be held to the nose, and hartshorn and water given internally. After recovery every

exertion and debilitating cause must be avoided, and public places should be shunned.

Hysteric, are often mistaken for fainting fits. They are generally at first attended with an uneasiness about the stomach or heart, which very soon affects the throat, producing a feeling of fulness or choaking, succeeded by convulsive motions of the muscles. They often end in a state of quiet insensibility, only occasionally interrupted by sobs or slight struggles, so that to a superficial observer the patient seems to be in a faint, but the pulse is not so weak as in the fainting fit. In some instances there is very great motion of the different muscles, and the patient at intervals shrieks aloud, or stares wildly about her, or alternately laughs and cries, and much wind is discharged from the stomach, or may be heard moving in the bowels.

During the fit the patient should be laid in a reclining posture, and have a teaspoonful of volatile tincture of valerian, given in a little water; or if the fit continue long, thirty drops of laudanum may be given, but this medicine should not be often employed, if the fit be repeated daily, as it often increases the tendency to return afterwards. A repetition is to be prevented by keeping the bowels open, taking some blood, if the patient be plethoric, and putting her on spare

diet; or if she be thin and delicate, employing strengthening means, such as the cold bath, and more nourishing diet. Sometimes repeated doses of castor, asafetida, or camphor, are of use. Strong passions and mental agitation of every kind should be avoided.

SECTION XV.

Palpitation is a most distressing disease. It consists in a violent beating or pulsation in the left side of the chest, often extending to the throat, and accompanied with a feeling of heat of the face, or pain or knocking in the head. It is also frequently accompanied with a great apprehension of danger, alternate fits of heat and cold shivering, and much wind in the stomach. It may take place at any period of pregnancy, but is often in the latter part of it brought on by a disordered stomach.

During the attack the patient must remain at rest, and if it do not go off soon, thirty drops of laudanum should be given, in a little peppermint water, but if the fits are repeated, this medicine must not be employed in every new attack, but rather pretty large doses of valerian, asafetida, or camphor. A repetition is to be prevented by keeping the bowels regular, avoiding every thing that disagrees with the stomach, and whatever can

agitate the mind. If the patient be delicate, preparations of iron are useful; if of a full habit, blood-letting is more beneficial.

Fits of breathlessness coming on suddenly and going off again completely, require a tea spoonful of spirit of lavender, or tincture of valerian, in a little water. More permanent difficulty of breathing is of a different nature, and a practitioner should be immediately consulted.

SECTION XVI.

Cough is sometimes an attendant on pregnancy, though it is attributed to an accidental exposure to cold. It is most frequent from the fourth to the sixth month, and may be accompanied with a sense of suffocation, giddiness and headach, or with spitting of blood. If neglected, it is apt to occasion abortion. It is most effectually relieved by means of blood-letting and gentle laxatives, afterwards, if necessary, lozenges containing opium may be employed for a short time. Sucking gum arabic also allays tickling about the top of the wind-pipe. A warm plaster applied between the shoulders is sometimes of use. The cough often forces off the urine involuntarily, but for this nothing can be done except wearing a compress of soft cloth when in company.

SECTION XVII.

Headach is another distressing affection, which often is connected with a debilitated stomach and costiveness. The food sours soon after it is taken, there is much wind in the stomach, the tongue is white or yellowish, the eyes languid, the face pale, and the pain is frequently periodical, coming on about a certain time, and affecting often one part of the head. It may be accompanied with giddiness. It is relieved more effectually by gentle laxatives given daily for some time, than by any other plan, and the diet should be light. A more dangerous headach is attended with a feeling of fulness about the head, flashing of fire before the eyes, ringing in the ears, a troubled eye, and giddiness, increased on stooping or lying down. This kind of headach, which is never to be neglected, is sometimes attended with pain and oppression about the stomach. It requires immediate blood-letting, laxatives and spare diet. By omitting these the patient may be seized with convulsions, the treatment of which it would be of no use to detail fully in a work of this kind. I may only caution against the use of cordials or stimulants when they do take place.

SECTION XVIII.

Pain and swelling of the breasts may take place very early, and with some are among the first signs of conception. The pain is not generally constant, but comes in fits, and darts out at the nipple. When this is the case, more relief is derived from rubbing the breasts gently with olive, or camphorated oil, than by other means, at the same time that they are kept warm and defended from pressure. The bowels are to be preserved regular. If the pain come on later and the woman is of a full habit, and no relief is obtained by the oozing of a milky fluid from the nipple she ought to be bled. Sometimes the pain is constant, and presently is accompanied with hardness and heat in some part of the breast. Should gentle friction not speedily relieve this, a warm bread and milk poultice is to be applied, and if matter form, it ought to be let out. Sometimes the breast suppurates twice during the same pregnancy. Painful swelling with hardness, either in the breasts, or near the passage to the womb, occurring during pregnancy, always suppurates.

Toothach sometimes is produced very early by pregnancy. The tooth ought not to be

pulled, as this may cause abortion. Blood-letting is of more benefit.

SECTION XIX.

Pain about the back and top of the thighs is often felt, especially in the early part of pregnancy, and frequently is brought on by walking rather more than is proper. The pain is sometimes pretty sharp, and is not constant, but may abate or go off even like labour pains. This requires a state of strict rest for some days, and the part to be rubbed with anodyne balsam, or if the pulse be full and the patient strong, some blood should be taken away. Afterwards if the pains continue with less severity, but with obstinacy, the cold bath is useful. Another kind of pain affects the back alone, and is of an aching nature, with a feeling of weakness. This is often much relieved by the shower-bath, and the application of a strengthening plaster.

From the distension of the muscles of the belly, pain is produced about the share-bone or end of the breast-bone, or on one side at the edge of the ribs. This is often a cause of much but groundless anxiety. It is not of any consequence, but it may continue till delivery. Rest, change of posture, rubbing with strong spirits, or with laudanum, give

temporary relief. If the pulse be full and frequent, bloodletting is proper.

Cramp in the legs is relieved by change of posture, and rubbing with anodyne balsam.

In consequence of the stretching of the muscles, some of the fibres may separate, so as to allow part of the intestines to be pushed out beneath the skin; or this may take place at the time of delivery, and a pretty large swelling arise on some part of the belly. If the opening be large, the bowel is easily pressed back, but starts out and renews the swelling whenever the woman walks, or even attempts to rise. This is called a rupture, and it may also take place at the navel, &c. The bowel is to be reduced, and kept in by a well adapted but easy bandage, and costiveness is to be prevented. When the woman is in labour, and has forcing pains, it is often necessary to apply the hand to the part, to keep the bowel from being strongly forced out, and after delivery pressure must be immediately made, otherwise faintishness may be produced.

SECTION XX.

It is usual during pregnancy, especially in the latter end of it, for the feet to swell. This swelling is greatest at night, and goes off after having been for some time in bed. It

requires no particular treatment, but is generally diminished by laxatives and moderate exercise. In some cases, however, the swelling is great, or does not disappear on lying down. It even affects the arms, or trunk of the body, and sometimes the face. This is a very unpleasant disease, and not free from danger. It is, however, generally removed by blood-letting and laxatives, but in such circumstances the best advice ought always to be procured.

A different kind of swelling of the legs, proceeds from an enlargement of the veins. The feet are not necessarily swelled, but along the inside of the leg, towards the knees, is a chain of knots of a blue colour, disappearing by using friction after lying down. This is relieved by applying a roller, with a moderate degree of firmness, but not so tight as to give uneasiness, or affect the circulation.

SECTION XXI.

The belly may be unusally swelled either from dropsy, or from the uterus being greatly enlarged. The first of these states is generally accompanied with a considerable swelling of the feet and legs, costiveness, scanty urine, white tongue, distinct fluctuation, and bad health, and is often connect-

ed with disease of the liver. The treatment cannot with utility be pointed out here, as the medicines employed for carrying off the water are too active, and require to be too much varied to be entrusted to the management of any one who is not skilful. The second state proceeds from an increased quantity of that water in which the child is contained before birth. About the third or fourth month, or later, the belly is observed to be larger than usual, and increases rapidly in size, so that by the seventh month it is often as large as it ought to be in the ninth; the motion of the child at the same time becomes weaker, and it is felt rather to flutter than move briskly. Premature labour comes on, and the child is expelled either dead or very feeble, and a vast quantity of water comes away before it. The same person is liable to a repetition of the misfortune. On the commencement of this disease, the cold bath, laxatives, and occasional blood-letting should be employed. But if the swelling increase and the motion diminish, all that can be done is to moderate, by suitable remedies, complaints of the bowels, &c. which may accompany this state, and when labour comes on, to have recourse to a skilful midwife, as flooding, or other bad accidents may take place. This condition of the conception

sometimes proceeds from a bad constitution of one or both of the parents, and a repetition of the evil can only be prevented by the careful use of such remedies as the state of health may demand. In certain cases after every other mean fails, a prudent use of mercury is successful.

SECTION XXII.

Discharges of water may take place at different times during pregnancy, especially in the two last months. The quantity is variable and sometimes the discharge is accompanied or succeeded by irregular pains. Occasionally a small bladder comes away with the water. It is useless to enter here into the question whether this discharge consists of the water in which the child lies. It is sufficient to say, that if the woman be not at the full time, and labour have not commenced, she ought for a time to keep in bed, and if she feel irregular pains, to take thirty drops of laudanum, and afterwards some gentle laxative to prevent costiveness. By these means she may go to the full time. If the water come oozing away for many days, the use of an astringent injection, similar to that proposed in the chapter on abortion is proper.

SECTION XXIII.

Discharges of blood, during the three last months of pregnancy, are much more alarming than the accident last described. Scarcely any subject requires more attention from the practitioner than the doctrine of flooding. These discharges may take place under a variety of circumstances; they may succeed some unusual exertion, some sudden fright, or some imprudent and continued fatigue, or they may occur without any evident cause; perhaps the patient awakes as if from an uneasy dream, and feels herself wet with blood, or has an inclination to make water, and is astonished to find she is losing a great quantity of blood. The immediate effects of this discharge are usually those of fear, for the patient is much alarmed, but no material bad consequences in general follow from the first attack. It stops presently, but how soon it may return is uncertain. In some cases it never re-appears; in many others it returns in a short time, and returns oftener than once. The strength is thus impaired, especially if the treatment have been negligent, and in every case there is naturally an attempt made to excite labour. The pains, however, are in general both very slight and very ineffectual; but they serve

this good purpose, that they render it possible to deliver the patient both easily and safely.

It would, however, be altogether useless to explain here the various causes of this accident, or the different points of practice. It will be of infinitely more advantage to give the following short rules for conduct. The first is, that the woman go immediately to bed without loss of time, and remain there till the discharge be completely checked, and for several hours afterwards; and if it have been copious, and is found to increase on moving, she must remain even for some days, and in those cases where it is easily brought back, it is necessary to confine her for some weeks. Second, Port wine and all warm drinks and cordials, do in general much mischief. Third, If the discharge be trifling, and abate soon after lying down, nothing more is at this time necessary; but if it continue in small quantity, and be accompanied with irregular pains, a dose of laudanum is often of benefit. Fourth, If the discharge be more copious, or continued, it is useful to apply cloths dipped in cold water to the entrance to the womb, or to press firmly with a soft cloth, but in such circumstances advice ought always to be procured. Fifth, If the patient become faintish, she is not to be suddenly recovered with cordials, for these re-

new the discharge; nature stops it by the faintishness, during which the blood circulates slowly. But if the faintishness continue long, and the skin is cold, a small quantity of wine, or hartshorn with laudanum, may be given, and a warm flannel applied to the feet. Sixth, All external heat should be avoided, unless the skin be cold; therefore few bed-clothes are allowable; the windows in summer should be opened, the drink must be cold, and the food of the lightest kind, such as stewed apples, soup, toasted bread, &c. Seventh, If the attacks be severe, or repeated, nothing can save the mother and child but delivery, which must not be too long delayed, in expectation of pains coming on, or of their becoming brisk, if they have already taken place. It is extremely uncommon for the pains to become sharp or strong; generally they at last die away, and the patient would, without assistance, perish undelivered. Even where no pain is excited by the discharge, we find that delivery is practicable, if the loss of blood have been great. I cannot do a greater service to any one in this situation than to impress upon her mind, that if a flooding be great, or repeated, or protracted, no reliance can be placed on the powers of nature alone; and in those cases, where delivery is necessary for the safety of the mo-

ther, the earlier that this can be accomplished, the greater is the probability of the complete re-establishment of her health. The precise time to interfere, and peculiarities of treatment, required in particular cases, must be left to the practitioner. I may only add, that in extreme cases, opium appears to be the most useful cordial for preserving the remaining strength.

I do not mean to say, that in every case delivery will be requisite, for by means of astringent injections, rest, and the occasional use of opiates, the patient, if the discharge be trifling, or be not repeated, may go on to the full time, or be delivered naturally, but in all violent floodings there is little hope of this.

SECTION XXIV.

Convulsions, as will afterwards be noticed, sometimes occur during labour, but they may also take place during pregnancy, especially after the sixth month. They are different from common epilepsy, for they attack those who never formerly had nor never again shall have a fit; and they are also more severe and dreadful in their appearance than epilepsy. They are usually preceded by some symptoms which indicate their approach, such as a sense of fulness or heaviness in the head, severe or even excruciating headach,

dimness of sight, or appearance of substances floating before the eye, sometimes dark, sometimes of a fiery brightness. They may also be preceded by cramp in the stomach, attended with dreadful sickness. They are likewise to be apprehended, if the face and arms be swelled, in the same way as the feet are in an ordinary pregnancy. The fit comes on suddenly, the patient falls down convulsed, the face is most terribly distorted, and every feature rapidly altered; she foams at the mouth, breathes with a loud snoring noise, and shakes with prodigious force. She is quite insensible of all that is going on, and no exertion can rouse her, or make her understand. After the fit is over, she either remains in a deep apoplectic sleep, till agitated by another attack, or she becomes at once well and perfectly unconscious of what has happened. The fit may last only a few seconds, or may, with scarcely any intermission, continue above half an hour. There may be only one, or there may be repeated attacks, and when this disease proves fatal, it is generally by inducing a state of apoplexy, or fatal stupor.

At whatever period of pregnancy convulsions take place, we uniformly find, that if they are repeated, and do not prove fatal, they bring on labour, or at least open the mouth of the womb. But there are many instances, where, by proper measures, the repetition

of the fits have been prevented, and the patient has gone safely to the full time.

The practice consists chiefly in evacuation. The patient must be instantly bled, and the bleeding must be repeated once and again, if it do not prove at first efficacious. A prodigious quantity of blood has been taken away with advantage, and has been the mean of saving life. The bowels are also to be opened immediately, by an injection of soft soap dissolved in warm water, and afterwards purgatives are to be given. The head is to be shaved and blistered. If by these means the disease be checked, then no more is to be done; but, by the use of camphor, the nervous irritation is to be allayed. But if the fits return, or if the first attack be obstinate and severe, and the mouth of the womb is affected by it, the security of the patient consists in artificial delivery. The propriety of this important step depends altogether on the state of the womb.

It is a useful and general rule, in all convulsions, to insert a piece of soft wood, or some such substance, between the teeth, to prevent the tongue from being bit.

SECTION XXV.

Many women are afflicted, long before their confinement, with pains so nearly resembling those of labour, that they often are

mistaken for them. They may affect the back, and come on with regular intermissions, and are peculiarly apt to occur during the night. They may be distinguished by being rather more irregular and shifting than those of labour, or being more early attended with a pressing down. They are also usually accompanied with griping or wind in the bowels, or some difficulty in making water. By degrees they abate and go entirely off. They are removed by keeping the bowels in a regular state, avoiding much exertion, losing a little blood, if feverish; and generally they are much mitigated by a dose of laudanum and change of posture. They are sometimes produced by worms, which are removed by giving an injection of strong decoction of chamomile flowers, with salt, and using laxatives.

Occasionally they affect the side chiefly, and are accompanied with a great motion of the child. Rubbing the part with anodyne balsam sometimes does good.

Shivering not unfrequently occurs in the end of pregnancy, especially in the nighttime, and as labour sometimes begins with this, it creates an unfounded belief, that delivery is approaching. It is either unattended with pain, or the pain is irregular, affecting chiefly the bowels or sides. It goes off by taking twenty-five drops of laudanum, in a glass of water gruel.

PART SECOND.

OF LABOUR, AND THE CHILD-
BED STATE.

CHAPTER I.

Of Labour.

PREGNANCY is completed in nine calendar months, at the end of which time the child is so perfect and vigorous, that it is able to live when its connection with the mother is dissolved.

It is usual, in calculating the time when labour is to be expected, to date conception a fortnight after having been last unwell, and this is generally sufficiently correct. Delivery then may be looked for, forty-two weeks after the last regular appearance of the menses. This calculation, especially in those who can judge from former experience, is rectified by observing how far the period of quickening corresponds with the supposed time of conception, as the motion of the child is usually first perceived about the end of the fourth

month. Some unknown causes, or some error of calculation may, however, delay the delivery of the infant a few days beyond the expected time, but still more frequently we find, that the labour is earlier instead of later, than the period which a proper calculation ought to have fixed. Some women feel no pain nor uneasiness till labour actually commences. Others from shiverings, or spurious pains, fancy themselves to be on the eve of delivery many days, or even some weeks, before that event takes place.

There are three different steps in the delivery of a child. First: The mouth of the womb must be gradually opened. Second: The child must be expelled. And Third: The after-birth must be thrown off. The first of these effects is accomplished by repeated contractions of the womb, which produce sharp or grinding pains. The second is fulfilled by more forcible efforts, productive of bearing-down pains, which at last increase to great severity. The third takes place some time after the child is born, and is attended with very slight pain.

The first stage is preceded or accompanied by a subsidence in the size of the belly, and the child is often felt, even for some days, to be carried lower than formerly. The pains at first are short, and come seldom. They go entirely off during regular intervals, but they

often leave a considerable degree of general uneasiness, so that the woman feels restless and uncomfortable, or is hot and cold by turns, and in some cases has a sensation of sickness, or gripes, or a troublesome desire to make water. The pains are usually felt chiefly in the back, but in some cases they soon shift to the fore part of the belly, or are from the first felt there. They are at first very slight, and last only for a short time, perhaps not half a minute, and return at the interval of fully half an hour; but they come on with more frequency as the labour continues, and are felt lower down in the back, and shoot round to the share bone, or top of the thighs, and after some time it is usual for them to stretch down the thighs, and cramps are also occasionally felt in the legs. They are also attended with an inclination to catch at, or take hold of, the chair, or of any thing which is near.

The pains after a short time gradually increase both in sharpness and frequency, and then they often seem to decline for a time, after which they again become brisker. There is a great diversity in the situation and degree of the pain; for in some cases it is felt chiefly in the belly, in others in the back; sometimes it is attended with shivering and trembling, in other cases with sickness

and vomiting. These circumstances, though unpleasant to the patient, are by no means unfavourable, but on the contrary, often attend a quick labour.

This stage is attended with a discharge of slimy fluid, which, when the orifice of the womb is considerably opened, becomes of a red colour. These pains are often sharp, and seem to be doing no good, and the woman is apt to become restless and fretful, and as they are sometimes attended with sickness, heartburn and vomiting, she becomes impatient or depressed in her spirits.

These pains proceed from the attempt made by nature to dilate the mouth of the womb, and they must continue till this be accomplished. The complete dilatation is assisted and rendered both easier, and frequently more speedy, by the protrusion, through the mouth of the womb, of part of the membraneous bag which contains the child and the water. The degree to which it is pushed out of the womb, during a pain, varies much in different cases. Sometimes it forms a very slight projection, at other times it is very bulky, being little less than the child's head. When the membranes begin to be pushed down, the water is said to "gather."

The mouth of the womb being consider-

ably opened, efforts are next made to press down the child, or to empty the womb. These produce a change in the pains, which are attended with a little inclination to press down. This gradually increases, and at last the sensation of bearing-down becomes very strong and irresistible; and it is observed, that though the pains are strong and forcing, they are productive of less complaint, than those which in the beginning of labour appeared to be less severe. There is a great variety in the duration of this part of the process. It is sometimes gradual and slow, in other cases sudden and rapid. The pains may be strong and forcing, and have very little interruption, or they may come on at very regular periods, with complete intervals of ease.

During this period the membranous bag, in which the child lies, usually bursts, and the water which it contained is discharged. This event is followed by an increase of the pain, which becomes more forcing, and the spirits of the woman rise in proportion. At length the head of the child comes to the birth, and by repeated efforts is at last expelled. This is followed by the gradual delivery of the body. After an interval of ease, one or two slight pains are felt, which serve to throw off and expel the after-birth.

The duration of this process is various, but it is generally longer in a first child than afterwards. This is particularly the case with regard to the second stage. Some women are uniformly expeditious, others always tedious. Some have the first stage slow, and the second quick; some have the water discharged early, others not till the child is born. Some have much sickness, or retching, or shaking, and others none at all. In short, there is a great variety in these respects with different women, or even with the same woman in different labours. In a natural labour, the whole process is concluded within twenty-four hours after its commencement, often in a much shorter period.

It would be foreign to the intention of this work, to detail the management of labour; but it will be useful to give some general rules of conduct, which, though very simple, will yet, if attended to, be of great benefit.

The first is to choose the largest, best, and quietest room to be confined in.

The bed is to be placed so as neither to be too near the fire, nor exposed to a current of air. It is to be made up in a manner well understood by the sick-nurse, who places the mattress uppermost, as being more comfortable than a feather bed, when it is not daily made up. A folded blanket or dressed skin

is put next this, in order to prevent it from being wet or soiled. Over this the undermost bed-sheet is thrown, and the bed made up as usual. Afterwards a sheet in five or six folds is laid across the bed, and these being removed, when the child is delivered and the woman laid up, she finds herself clean and dry without further trouble.

Second. Every thing ought to be in readiness before it can possibly be needed, particularly the baby-linen, and such articles of dress as the mother may require.

Third. The nurse should be called early, and intimation given to the midwife that she may be found, when the woman is satisfied that she is in labour, or requires her.

Fourth. The bed ought to be properly made up when the labour begins, and it will be right for the patient to put on a half-shift or loose dress.

Fifth. In every case, unless when the bowels are too loose, it is of service to give a common saline clyster in the first stage of labour. This is attended with several advantages; it renders delivery a little easier and more comfortable, and sometimes promotes it sooner. It is also of use afterwards.

Sixth. During labour all heating drinks and stimulants, such as wine, caudle, cinnamon-water, &c. are to be avoided, as they

make the woman hot, restless, and uncomfortable, protract the labour, and lay the foundation for subsequent disease. The drink should be of the most cooling kind, such as gruel, toast water, or cold water; and the food, if any be desired, ought to be very light, and in small quantity. The bed curtains are to be kept open, and the room cool. If the light be disagreeable, the window curtains can be let down.

Seventh. In the first stage of labour, the patient may stand, walk, or sit, or remain in bed as she is inclined, but she ought by no means to stand so long, or walk so much, by way of forwarding the labour, as is productive of fatigue; and after the pains become very frequent and pressing, it will, in general, not be prudent to come out of bed.

Eighth. Before the child is delivered, there is often a strong desire to rise to go to stool, but this is not to be indulged, without permission from the midwife, as the child might be born when the patient rises up.

Ninth. An early examination is desirable, as it is of consequence that the midwife ascertain the progress of labour, and the presentation of the child soon after her arrival. If the presentation be bad, it is much more easily rectified before the water comes away than afterwards.

Tenth. The mind must be preserved as tranquil and cheerful as possible, and for this purpose, if the patient be not disposed to sleep, during the interval of the pains, it is of great consequence to have a prudent nurse, or one friend in the room, to keep up easy conversation; but a collection of two or three people, especially if they be gossips, is very pernicious.

Eleventh. Tossing in bed, and much crying or fretting, when the pain is off, must be avoided as much as possible, as these add to the fatigue.

Twelfth. All attempts voluntarily to press down, during the pains, are generally unnecessary, and are highly improper at the end. It is, on the contrary, of consequence that the head should not be expelled quickly, as the mother is apt to be torn.

Thirteenth. After the head is born, the body should be allowed to be delivered by a subsequent pain. There is often a considerable interval between the birth of the head, and the expulsion of the body, which ought to be no ground of anxiety, and the midwife should not be encouraged to hurry this part of the process.

Fourteenth. If the patient have a rapid labour, and the midwife is at a distance, she ought to keep constantly in bed, and refrain

as much as possible from bearing down. If the child should be born before assistance is procured, the nurse should tie the cord firmly, near the navel, and apply another ligature about three inches from the first, and cut the cord between these ; or if she be afraid to do this, the child must lie beside the mother till the midwife comes, taking care that the face be uncovered, to permit of breathing.

Fifteenth. In the course of a short time after the child is born, the afterbirth is expelled without any assistance. The vessels which passed from the womb to the afterbirth would, when this was separated, pour out an increased quantity of blood, did the womb not contract so much as to diminish their size, and compress their orifices. This contraction both expels the afterbirth, and prevents flooding. When, therefore, the afterbirth is expelled, we have an evidence of the existence of that state of the womb which insures the safety of the mother. Until this take place, both the patient and midwife should be attentive lest there be a great discharge, and if this occur, no time is to be lost in checking it. This is done by exciting the contraction of the womb, by the application of a cloth, wet with cold water, to the lower part of the belly, and to the passage to the womb, and also by the introduction of the hand of the midwife to

stimulate the womb. Some do this with the sole object of extracting the placenta or after-birth, considering the retention of this as the cause of the flooding. But this opinion is wrong, and the mere extraction of the placenta can only do good, in so far as the introduction of the hand, and the means used to effect this, serve to excite the action of the womb itself. Forty or fifty drops of laudanum, in a little cold water, are useful as a cordial, in case of flooding.

It follows from this view, that every exertion must be avoided before the placenta is expelled, and the patient must be kept cool and quiet. If flooding do occur, when no midwife is present, the nurse, or the most composed friend, should immediately apply cloths wet with cold water, open the windows to admit cold air, take off part of the bed-clothes, and give the dose of laudanum already proposed. If the weakness increase, cordials, such as a little wine, will be proper to preserve the strength, till assistance can be procured.

CHAPTER II.

Of Tedious and Preternatural Labours.

A natural labour is terminated within twenty-four hours, at farthest, after the mouth of the womb begins to open. Various causes, however, may conspire to prolong the process, and render labour tedious. It is altogether unnecessary, in a work of this kind, to enter minutely into a consideration of these causes, or of the different means employed for counteracting them. But some advantage may be derived from a few general observations.

Tedious labour may occur under three different circumstances. First: The pains may be, from the commencement, few and weak, and the labour may, if left to itself, be long of becoming brisk. Second: The pains, during the first stage, may be sharp and frequent, but not effective, in consequence of which the power of the womb is worn out before the

child has advanced far, or come into a situation permitting it to be expelled. Third: The pains, during the whole process, may be strong and brisk, but from some obstacle, the delivery may be either greatly protracted, or rendered altogether impossible, without assistance.

Different causes may produce these states, such as general weakness of the constitution; particular weakness of the action of the womb itself; premature discharge of the water; fear, impatience, and strong passions of the mind, which sometimes suspend the pains altogether for a time; rigidity of the soft parts through which the child must pass, or particular states of the mouth of the womb, which can only be discovered by careful examination by the midwife; suppression of urine; a disproportion between the size of the child and the bones of the mother; an unfavourable position of the head, &c.

These causes do not uniformly produce the same effect, nor is it possible for the patient herself to say by her feelings, in the early part of labour, whether or not it is to be tedious.

The pains are sometimes slight and lingering; sometimes very severe, particularly in the back, and they may continue so for a long

time, without doing any good; or towards the end, pressing-pains come on which have very little force, and rather exhaust the strength, than forward the delivery.

On this subject I shall satisfy myself with making the following remarks.

First. When the first stage of labour is severe and protracted, and the pains do little good, it can scarcely be disputed by any one who reflects on the matter, that in order to prevent the power of the womb from being exhausted, it is necessary either to make the pains more efficient, or to suspend them altogether for a time, till the strength be recruited, or the situation rendered more favourable.

Second. When the pains are lingering and slight, or teasing, a saline clyster has very often the happiest effect in exciting more brisk and productive action.

Third. A change of posture, or walking a little in the room, has also a good effect in making the pains brisker, provided that the patient is not tired or troubled by such motion. It is evident that whenever sitting or walking produce fatigue, or are felt to be disagreeable, they must do harm.

Fourth. All efforts to bear down during the pains, in the first stage of labour, and every

fatiguing attempt to increase the frequency, or force of the pains, must eventually retard labour, by exhausting the strength.

Fifth. The strength, during a tedious labour, is to be supported by mild nourishment, such as beef tea, chicken broth, panado or gruel, &c. and if the patient be much fatigued, a little wine may be given, provided it do not make her restless or hot. Sleep is to be encouraged, and the mind is to be soothed and supported, by looking forward to a happy termination.

Sixth. Some means are to be employed for preventing the pains from continuing severe but unproductive. These must vary according to circumstances, but the end in view is of the utmost consequence, as we thus avoid much suffering, and sometimes no small risk. In some instances, a little manual assistance is safe and highly useful; in others, remedies suited to the occasion must be resorted to.

Seventh. Premature discharge of water is very apt to occasion painful and tedious labour, unless the mouth of the womb be relaxed, and the complete evacuation of the water be promoted.

Eighth. The two most powerful means we can employ for remedying some of those conditions, which give rise to tedious and severe

labour, are blood-letting and the use of laudanum, either as a draught or as a clyster. The states requiring or admitting of these it is impossible to explain here, but it may be of service to do away a prejudice which may exist against their employment when they are necessary. Opiates are serviceable, sometimes as cordials or general stimulants; at other times, they are beneficial by suspending the useless but painful action of the womb, and thus allowing time for the strength to recruit, and these effects they produce more safely and effectually than any other means could do. They are also of efficacy in checking that irregular spasmodic action of the uterus, which gives much pain, and rather retards than forwards the expulsion of the infant.

With regard to blood-letting, there is only one objection of any weight, namely, that it will weaken the patient; but in reply to this I observe, that if it have the effect of rendering the delivery more speedy and safe than it would otherwise be, it will rather save the strength by preventing unnecessary fatigue. It is also well known, that a much greater quantity of blood is often lost after delivery, than would have been taken from the arm, and yet no bad effect whatever follows from it. When convulsions occur during labour,

or in the end of pregnancy, six times the quantity of blood that would be taken in any other situation, are often detracted with present relief and future advantage. Last of all, the experience of different ages and various countries proves the safety of the practice. It is not a remedy newly introduced, the effects of which we are ignorant of, for it has even been the habit of some, to bleed women in natural labour, in order to render it still more easy and expeditious.

Ninth. In tedious labour means are to be used for removing any disagreeable effect, which may follow either from the continuance of the pain, or the pressure of the child's head. We are, in particular, to be attentive that the urine be voided regularly, and that neither fever nor local inflammation be excited by the protracted labour. Blood-letting is a powerful mean of preventing either of these effects, and the use of the common saline julep is also serviceable.

Tenth. Some unfavourable positions of the head, and some conditions of the mouth of the womb, may be rectified by the finger without giving any pain, and much suffering and risk may thus be avoided.

Eleventh. If, notwithstanding all our care, the labour be protracted until the strength is impaired, and the pains are ceasing; or, if the

obstacle be so great, as during the course of labour to make the head be fixed within the bones of the pelvis, and produce suppression of urine, or a tender state of the soft parts, with a sense of tightness within the pelvis, restlessness, giddiness or pain in the head, severe pain or feeling of pinching, even in the absence of the labour-pain, about the share-bone, or other symptoms, indicating to the practitioner, that the powers of nature cannot any longer be safely trusted to, it will be necessary to have recourse to the use of instruments. These are never to be resorted to except in cases of absolute necessity, but it cannot be too strongly enforced on the mind of a patient who requires them, that if she delay, after they have been advised by a practitioner of judgment and integrity, her own life and that of her child may be lost.

Twelfth. Some positions of the child render delivery impracticable, without the greatest hazard to the mother, and therefore it is necessary, when these are discovered, to have the child turned. This is in general easily accomplished, if the water have not been discharged, but if it have been long evacuated, it is not to be attempted till by the administration of sixty or eighty drops of laudanum, the pains are suspended. A neglect of this

rule may be followed by very serious consequences.

Falling down of the navel-string before the presenting part of the child, has no effect on the labour, but if the management be not very careful, the life of the infant may be lost.

Thirteenth. Deadly sickness, with pain in the stomach, during labour; or headach, increased during the labour-pains, and accompanied with dimness of sight, or appearance of sparks of fire before the eyes; or severe tremors in the second stage of labour, after the mouth of the womb has been fully dilated; or great drowsiness during the pains, with slow pulse, are very suspicious symptoms, and indicate a tendency to convulsions. They are, if they do not very speedily subside, a sufficient warrant for having recourse to blood-letting, which prevents the evil, and also accelerates labour. If, however, convulsions do come on, then, besides instantly opening a vein, we must also deliver the patient.

Fourteenth. If flooding occur during labour, to any considerable degree, there cannot be a question that the patient must be delivered, either by turning the child, or by the forceps, according to the stage of labour and situation of the child.

Fifteenth. Twins frequently produce a

lingering labour, but there are no certain marks by which we can determine, that there are more children than one in the womb, either during pregnancy or labour, till after the first child is born. The only remark necessary to be made here, is that more than ordinary care is required after delivery, to prevent flooding and child-bed diseases.

CHAPTER III.

Of the Child-Bed State.

WHEN the after-birth is expelled, it is too much the practice with many to sit up immediately, and have the cloathes shifted. Most alarming floodings, and other bad consequences may result from this. The first thing to be done, is very slowly to remove the wet sheet from below the woman; she next turns slowly on her back, and has a bandage applied so firmly round the belly as to give the feeling of a pleasant support. The bandage often consists of a broad towel folded double, but it is better to have one made of stout cotton cloth, with tapes to tye, or buttons, with two rows of holes. It is prevented from slipping upward and wrinkling by a thigh piece, and in some cases it may be necessary also to have a shoulder strap*. Many

* When the patient is able to rise, it is frequently both of advantage, and productive of comfort, to have a firm bandage, with two broad pieces of whale bone in the back, to keep it even and smooth. It has shoulder straps above, and below it is made like very short drawers,

with advantage apply under this a compress made of a napkin or quilted pad. The bandage being applied, a flannel petticoat, open in the middle, is next put on, and wrapped round the limbs, and a soft napkin is to be applied to absorb the discharge. If the woman be fatigued, no more is to be done, but if she be not, an aired shift and bed-gown can be put on, and she is laid to rest, but if a half shift be used, during labour, there is seldom very great occasion to change it, for some hours at least. Although I am thus cautious respecting speedy shifting on account of the effect often produced by slight exertion, especially after a lingering labour, or in delicate women, yet I wish to inculcate the necessity of changing the cloathes as soon as prudence will permit, and afterwards shifting every day, and having the discharge washed away, morning and evening, with a sponge and lukewarm water. The number of bed-cloathes must be regulated by the season, but they never should be so many as to promote sweating, which weakens the woman, and gives a tendency to catch cold. It is usual to give some cordial after delivery, such as brandy or cinnamon water. Unless the strength be exhausted, there is seldom occasion for this, and it often does harm. A little wine and water may be given, if fatigued, or a little

panado with wine; or if the labour have been lingering, and there is much languor, a little Madeira wine is very proper.

A stool should be procured within thirty-six hours after delivery, by means of a suitable dose of magnesia, or a little castor oil. If the patient is not to nurse, the laxatives should be rather brisker.

The urine should always be passed within twelve hours, at farthest, after delivery, and if there be any difficulty in voiding it, fomentations will be useful. After a severe labour it is necessary to be very attentive to the voiding of the urine, and the state of the soft parts.

The diet ought to be light, and should consist for the first two days, of tea and cold toast for breakfast, beef or chicken soup for dinner, and panado for supper. Afterwards a bit of chicken may be taken for dinner, and as recovery goes on, the usual diet may be returned to. In these directions, however, regard must be had to the previous habits and present state of the patient. The drink at first should be toast water, and malt liquor is for some days to be avoided; wine, or wine and water may be allowed, if no fever be present, and the weakness or former habits of the patient require it. In a good recovery

the patient may have the bed made on the third day, but during the time she should recline on a sofa. In a day or two longer, she may be allowed to be dressed and sit a little, but ought not to walk about, or leave her room for some time; and even in summer should not go out for an airing in less than three weeks. Many before this time do rise, and even attend to domestic cares earlier, but they often suffer very much, either from a weakening discharge, or a falling down of the womb.

CHAPTER IV.

Of Trembling and Fainting.

It is not unusual for women, very soon after delivery, to be seized with a violent shaking or shivering, sometimes in consequence of rash and sudden exposure to cold, after being heated with the exertion of labour, but often from no evident cause. Nothing, in general, gives so speedy relief as a pretty large dose of laudanum, forty or fifty drops, for instance, in peppermint water, or in a little wine. At the same time the patient is kept in perfect rest, and when she is inclined to shake, she must be held gently by an assistant, so as to prevent her from doing so in a great degree. If she feel cold, and the teeth chatter, the application of a warm cloth to the stomach and feet is useful. This is not a dangerous and seldom an obstinate affection. If it, however, should be prolonged, camphor is of service.

Fainting is always an alarming symptom, and when it occurs, the first thing to be as-

certained, is whether there be a great discharge or flooding; in which case the danger is extreme, and the treatment of this has been already pointed out. It may also attend inversion of the womb. But some women are, after a tedious and severe labour, and others even after very little suffering, liable to a short and temporary exhaustion, approaching to a fainting fit, or very often to that kind of insensibility, or lowness, which occurs in an hysteric attack; and like it, this is frequently preceded by an involuntary crying or sobbing immediately after the birth of the child. This is not dangerous, indeed there is never great ground for alarm, whilst the pulse continues very good and there is no discharge, for in this case, the patient may rather be said to be in a state of stillness or quietness than fainting. In those cases where this state occurs, after delivery, a few drops of oil of cinnamon on sugar are useful; or we give thirty drops of laudanum in a little wine, or brandy, or harts-horn and water, whilst a free circulation of air is to be preserved. Volatile tincture of valerian is recommended by Dr. Hamilton to be given, as soon as the child is born, to those who are subject to fainting fits, and certainly is a useful remedy.

In those more alarming fainting fits, where

the face is quite pale, the extremities cold, and the pulse nearly gone, if no medical assistance is at hand, the following directions may be useful. The heat is to be preserved by the application of warm clothes to the stomach, hands and feet; and if the patient can swallow, a spoonful of wine is to be given frequently, until assistance can be procured. The slightest motion is to be avoided, and the patient is to be kept with the head low. If there be a discharge from the womb, a soft cloth is to be pressed firmly on the external opening, and pressure is to be made at the same time on the lower part of the belly with the hand, to prevent the womb from distending with blood, and to excite its action. Forty drops of laudanum are also to be administered. When vomiting is produced by flooding, solid opium should be given instead of laudanum.

CHAPTER V.

Of After-Pains, and Pain in the Belly.

AFTER-PAINS are sometimes extremely troublesome, during the first three days after delivery, and may even be more distressing than those of labour. They proceed from different causes, but the most frequent is the contraction of the womb to acquire its original size. This often occasions irregular grinding pains in the lower part of the belly, and sometimes in the back, like those of labour; they are usually accompanied with the discharge of clots of blood, and frequently are renewed for a day or two, whenever the child is applied to the breast. They are most effectually relieved by a full dose of laudatum, and warm fomentations.

Another kind is accompanied with wind in the bowels; the pain is not merely felt in the bottom of the belly, but in different parts, and comes on often like gripes or cholic pains, sometimes accompanied with a little fulness of the belly, and pain on pressing hard. This is relieved by an injection to open the

bowels, and afterwards a dose of laudanum in peppermint water, and fomentations. An injection, containing laudanum, is also useful. Sometimes worms cause this pain.

Severe pain between the ribs and haunch-bone may attack in paroxysms, continuing for more than half an hour, and then going off completely. It may be accompanied with quickness of pulse, and the urine is high coloured. It is relieved by opiates, fomentations, sinapisms and laxatives; and sometimes a pretty firm bandage gives temporary ease.

Constant pain, accompanied with shivering, vomiting, swelling and tenderness of the belly, fever, and suppression of the cleansings, indicate inflammation, and require the earliest attention.

Pain in the back and lower part of the belly, with a strong bearing-down, weakness, feeble pulse, and a discharge of blood, require examination, lest the womb be inverted. If much time be lost, the inversion may either prove quickly fatal, or remain during the whole life. It is neither necessary nor proper, in a work of this kind, to describe more minutely the inversion of the uterus, as the symptoms I have enumerated ought to make every woman have recourse to immediate advice. When the womb is so completely inverted that it comes out of the passage, the case is

clear to the patient herself; but I must impress it on the mind that this accident may also occur, in a less degree, when there is no external protrusion.

Pain in the belly, coming on suddenly, like cholic, without shivering or chilness, and attended with sickness, and sometimes frequency of the pulse, requires the immediate use of a salt clyster; the belly is to be fomented or rubbed with anodyne balsam, and the saline julap, with the addition of laudanum, is to be employed. If these means do not soon give relief, there is ground to fear, that whatever may have been the nature of the complaint at first, there is now great risk of inflammation taking place.

Pain in the belly, with swelling, and inability to void the urine, if not relieved by fomentations, requires the immediate attention of a practitioner.

Smarting and tenderness about the passages, require fomentations; but if there be extensive laceration, or an inability to retain the urine, a practitioner must be consulted; neglect may be attended with lamentable consequences.

CHAPTER VI.

Of Bearing-Down of the Womb.

I am next led to observe, that in consequence of weakness and relaxation, or of rising and walking too soon, the womb, being yet heavy and large, may fall low down, or may even come to protrude externally. This is called a bearing-down of the womb, and when it proceeds so far as to appear outwardly, the nature of the case is manifest. But this fortunately seldom happens at first, and the patient complains for a length of time of weakness and pain in the back, a sense of dragging about the loins, weariness and aching about the thighs and bottom of the belly, and unpleasant sensations when she attempts to walk, particularly a bearing-down; and by and bye, when the womb descends lower, she cannot make water easily, and in the whole progress of the complaint, the stomach and bowels are apt to be disordered, both in their functions and sensations. These affections of the stomach and bowels are often

very prominent symptoms, leading off the attention of the patient from the true cause, which can often only be discovered by the examination of a skilful practitioner.

This is a complaint which generally proceeds from relaxation, or from exertion before the womb has returned to its usual size, or from its remaining for a length of time larger than usual. This naturally suggests a caution against rising too soon, or making any early exertion; and it is peculiarly incumbent on those who are delicate in constitution, or enfeebled by previous disease, to be on their guard in this respect. Although, doubtless, rash management on the part of the midwife may occasion this complaint, yet it is much oftener the fault of the patient herself. It must also be impressed on the mind, that it may succeed a miscarriage, or may even occur in unmarried women, from excessive discharge, whites, or violent exertion, when out of order. Rest, in a recumbent posture, is of the greatest service in the early stage. The bowels are to be kept in a very regular state, by daily doses of cheltenham salt, or sal polychrest. The diet should be such as tends to increase strength; and for the same purpose, in a month after delivery, the cold bath may be employed, if no particular symptom forbid it; and along with this

very gentle exercise may be taken. The application of a proper bandage round the whole belly, with a moderate degree of firmness, often gives great relief to the uneasy feelings. If the complaint have been neglected, or resist these means, and increase, the use of astringent injections, a course of strengthening medicine, and some mechanical contrivances, which it is useless to describe, as no patient can on her own judgment employ them, will be required. This is a complaint which is apt to be increased during the first three months of a subsequent pregnancy, but after the third month it disappears.

There is another affection which may be confounded with this, namely, a relaxation and protrusion of the passage to the womb. This forms a soft swelling or prominence at the orifice of the vagina, which sometimes completely encircles the opening, but oftener is more on the one side than on the other, or is greatest behind. It gives no particular inconvenience, unless it exist in a great degree, and it usually disappears on going to bed. It requires the use of astringent decoctions, or alum water, externally, and the frequent application of cold water, by means of a sponge. If the patient be weak, strengthening remedies are useful, such as bark, steel, cold bath, &c.

CHAPTER VII.

Of Alterations of the Lochial Discharge.

AN increased and sometimes a continued discharge, after delivery, is often the consequence of getting up too soon, or making some early exertion. It is usually attended with pain in the back, and always produces weakness. It is to be removed by avoiding exertion, taking some strengthening medicine, such as bark and wine, and using, if it continue, the shower-bath. The aching pain in the back is often relieved by the application of a strengthening plaster.

The lochial discharge is in some women very trifling, and may even stop very soon without any bad effect. But when it is suddenly checked by exposure to cold, or other causes, most painful consequences may follow, such as swelling of the belly, great pain, sickness and fever. These symptoms are dangerous at all times, but are still more to be dreaded as they often attend inflammation, and indeed the two cases can only be distinguished by minute attention. Until assistance

be procured, a clyster should be administered, warm fomentations applied, and a perspiration encouraged by a saline julap, containing antimonial wine, together with tepid drinks.

Ill-smelled discharge proceeds from clots of blood lodging about the womb, and requires strict attention to cleanliness; it may even be necessary to wash the discharge from the passage with milk and water, by means of a syringe. If, however, this discharge be attended with sickness or nausea, quick pulse, hot skin, parched hands and feet, thirst and want of appetite, or repeated discharges of blood, and pain in the lower part of the belly and back, then there is reason to conclude, that part of the after-birth remains in the womb, and great attention is necessary to preserve the patient. This affection often passes at first for a weed.

The patient is worn out with nocturnal perspiration, fever, and want of nourishment, until at length a putrid mass is discharged from the womb, perhaps about the ninth or tenth day, or even after some weeks of suffering, and then the patient generally recovers.

The bowels are to be regulated either by laxatives or opiate injections, according to their state. The diet must be light, such as chicken broth, beef tea, calves-feet jelly,

arrow root, &c. The elixir of vitriol is useful for promoting appetite and checking perspiration. Camphorated mixture is of service for allaying nervous affections. Great attention must be paid to cleanliness and ventilation.

Exposure to cold, or a neglect of the proper bandage, often produces a swelling of the belly, which is not removed without great difficulty. It is prevented by having the bandage properly adjusted and kept with firmness, avoiding cold or exertion, and preserving the bowels in a regular state.

CHAPTER VIII.

Of Swelled Leg.

AFTER delivery one of the legs is sometimes affected with a painful swelling, which is often, though not always correctly, attributed to some violence in the labour, or some imprudence afterwards. It makes its appearance about ten days after delivery, sometimes sooner or even later. It begins with fever and pain in the back, or lower part of the belly, particularly about the groin, where there is considerable stiffness felt. The pain may gradually extend down the limb, but more frequently it is, after these symptoms, suddenly felt in the calf of the leg, or knee, and presently the whole limb, which formerly perhaps was cold, becomes hot and swelled. The acute pain then abates, but the limb continues tender, and can scarcely be moved. The pulse becomes much quicker, the face pale, the strength is greatly impaired, and frequently very copious perspiration adds to the weakness. At first this often passes for rheumatism.

Even under the best management this may prove tedious, and therefore recourse should immediately be had to a practitioner. Leeches should early be applied to the groin, or cloths dipped in warm vinegar, or solution of sugar of lead. The bowels are to be opened. If the limb have become affected, then fomentations, and friction with anodyne balsam, or camphorated oil, give relief; at the same time the bowels are to be kept regular with cream of tartar. When the acute symptoms are over, and the limb remains weak, friction with the flesh-brush is proper, and a roller should be applied with moderate firmness from the toes to the groin. The cold-bath is useful to re-establish the health. The diet ought, after the inflammatory symptoms have abated, to be nourishing, and sleep should be procured by opiates.

CHAPTER IX.

Of Delirium.

DELIRIUM, when it is not dependent on inflammation of the brain, rarely comes on sooner than a week after delivery, and sometimes not for a much longer time. It makes its appearance very suddenly, the patient not unfrequently awaking terrified from a dream, or all at once, she breaks out into some absurd or furious conduct. There is often very little increase of heat of the skin, or other appearance of fever; though in some instances there is considerable heat, and the pulse is very quick, and this is especially the case when there has just been some strong exertion, or much speaking. But, as in all other cases of nervous constitutions, the state of the pulse is subject to considerable and sudden variation. The patient is usually extremely talkative, and sometimes speaks with wonderful volubility. In some cases one idea seems to possess the mind; in others the object of apprehension or consideration is rapidly varied. She can, however, for a short

time be commanded, and at times, at least, appears perfectly sensible of what is going on beside her. It is not easy to say what cause produces this disease, for it does not appear to be connected with a tendency to mental derangement in other circumstances. The duration of this complaint varies from a few days to some weeks; but it rarely, under proper management, proves fatal.

My experience leads me to consider blood-letting as useless and sometimes hurtful. The most efficacious practice consists in shaving the head, and applying a blister, opening the bowels, determining to the surface, with saline julap, and afterwards employing camphor freely to allay irritation. The patient must be carefully watched.

Melancholy usually comes on later than delirium, and is more obstinate.

Inflammation of the brain is also attended with delirium, but is very different from the former complaint, which is chiefly dependent on nervous irritation. This usually appears on the second or third day after delivery, and from the time of delivery, or very soon after it, the pulse is frequent. The patient is, before the violent symptoms come on, observed to be restless and watchful, and cannot sleep. The eye is very sensible to the light, and the patient hears acutely. She

complains of headach, or confusion in her head, and the secretion of milk does not take place, or stops if it has. Furious delirium then occurs; the eyes are wild and sparkling. She pays no regard to, or does not seem to recognize objects around, and she can rarely be commanded, even for a time, by any one. This is a more fatal disease than the former; for the patient is very apt to be carried off with symptoms indicating oppressed brain, such as great stupor, noisy breathing, cold clammy sweats and convulsions. This termination occurs about the third or fourth day, though sometimes considerably later. It is not easy to say what excites this complaint. In some cases it has appeared to depend on a family disposition to mania; but in other instances it proceeds from the child-bed state alone, which often is accompanied with a strong tendency in particular organs to inflammation. The treatment consists chiefly in the use of blood-letting, the application of leeches and blisters to the head, and purgatives. If the delirium continue after the inflammatory and febrile symptoms abate, camphor is the remedy principally to be depended on.

Apoplexy may also occur in child-bed, particularly in those who are of a full habit, and have complained of much headach dur-

ing the latter end of labour, and after delivery. If the headach and confusion, or giddiness, with appearance of fire flashing before the eyes, or sickness, are disregarded, it is not unusual for the patient to drop down, and remain insensible until death. I have always found this to proceed from the rupture of a blood-vessel in the brain; and therefore the most effectual means of prevention consist in bleeding and purging.

CHAPTER X.

Of Looseness.

LOOSENESS in the child-bed state requires great attention. It is often produced by the costiveness which occurs during pregnancy, the hard stools irritating the bowels. In this case the stools are accompanied with pain, and sometimes bearing-down, they are slimy or bloody, and hard lumps are passed. This state requires gentle laxatives to clear out the bowels, such as solution of salts, or castor oil, then a starch injection, with laudanum, is to be given, and the bandage is to be kept firmly on the belly. The nourishment should be light. Looseness not preceded by costiveness, and unaccompanied with much pain or pressing, and in which the stools are liquid, and contain no lumps, is generally caused by cold, or some irregularity of diet. It is often attended with a discharge of blood from the womb, and pain in the back. The belly should be frequently rubbed with anodyne balsam, a gentle dose of

rhubarb should be administered, and then an opiate injection, or a mixture, may be taken, containing *confectio japonica*.

CHAPTER XI.

Of Weeds and Fevers.

WOMEN who are disturbed much in their repose, who have suffered greatly during labour, who have very sore nipples, who are inattentive to their diet, distressed in their mind, or exposed to cold, are liable to an attack of fever, called in this country a weed. The fit begins with chilness, cold feet, and violent trembling, pain in the back, headach, and in some instances, inclination to vomit. Presently flushes of heat are felt, which at last become steady, and the patient feels extremely hot and restless. In some time afterwards, perspiration breaks out, continues for a considerable time, and at last abates, leaving the woman free from fever, but very languid. During both the cold and hot stage the pulse is frequent, and there is thirst;

but in the sweating stage both these symptoms decline. The whole fit is usually finished within twenty-four hours, frequently in a much shorter period. There may be only one attack, but it is not uncommon for the fits to come on every day for more than a week, nearly about the same time, or an hour sooner or later each day; and in this case they are preceded by coldness in the back, accompanied with aching pain. In this state the stomach becomes filled with wind, the bowels are bound, and the patient is timid or hysterical. It is not, in general, a dangerous disease, but if it continue long, and the belly become swelled or tender, or the patient vomits frequently, or a degree of stupor come on, there is the greatest danger. In many cases one of the breasts becomes painful during the fit, and afterwards suppurates, which adds to the distress. Palpitation of the heart, with sudden changes in the feeling respecting heat and cold, often attend this disease.

When the cold fit comes on, our object is to hasten the hot one; which is done, not by putting many bed-clothes on the patient, for these are hurtful, but by giving frequently a small quantity of some warm drink, such as gruel or lemonade, and applying a bottle, filled with warm water, to the feet and pit of

the stomach, or to the back, if it feel cold. When the hot fit is established, these applications are to be removed, and the tepid drinks continued till the sweat come out. Means are not to be employed for pushing this far, but by taking a very little drink, and lying quiet for some hours, it is to be encouraged to continue in a moderate degree, till all the uneasy feelings and feverish symptoms are removed. Then, warm dry linen is to be put on, and cold avoided with care. It requires much prudence to say when the perspiration ought to be checked, but it is a good general rule, to continue it till the fever is removed. After the sweating is over, a little panado with wine is proper. A repetition of the fever is to be prevented, by avoiding those causes which first brought it on, keeping the bowels open, and taking some strengthening medicine, such as bark, or a preparation of iron, and procuring rest by opiates. When there is a tendency to return, the fit is sometimes checked by taking twenty-five drops of laudanum an hour before the expected time of attack, and applying warm flannel to the back.

If palpitation occur frequently, either along with this fever or without it, the best remedy is a large dose of laudanum, in a glass of peppermint water, and during the intervals

the volatile tincture of valerian, with laxatives, or the camphorated mixture, will be proper.

If the attacks of fever be repeated, or if it become continued, it will be necessary to give up nursing; and indeed in many cases the secretion of milk becomes so much diminished, as to render it impossible for the child to be nourished by the parent.

In some instances pain, perhaps of short duration, is felt during the week, at the lower part of the belly, or in the back, which goes off in a few hours, or in a day or two; but when the patient rises up she feels a renewal of the pain, and so much uneasiness or pressing downwards, that there is ground to suspect that a bearing-down of the womb has taken place. But the womb is felt in its proper place, and no relief is obtained by those means which alleviate that complaint. The inability to walk, or stand long, may continue until a slight discharge of blood takes place; and therefore, if this do not soon occur, it will be proper to wean the child, in order to encourage a natural alteration. In the mean time, the bowels are to be kept open, and the strength supported by suitable means. It is, however, always proper, in a case of this kind, to have the best advice.

Many are supposed to have a bearing-

down of the womb, when, in fact, the symptoms originate entirely from this complaint, and are not removed by the means which relieve the bearing-down. The womb, in this complaint, sometimes, but not always, remains a little enlarged until a cure is accomplished. One aloetic pill should be taken every night, and two drams of sal polychrest, in a tumbler of water, in the morning. The patient must recline much on a sofa, and if there is much uneasiness at night about the back or belly, it may be useful to sit down for a few minutes, in a vessel filled with warm sea-water. But the most effectual relief results from the patient becoming regular.

There is a species of fever which begins like a weed, but differs in being longer continued, and not consisting of repeated and daily attacks of shivering. The patient, within eight or nine days after delivery, generally sooner, is seized with shivering and coldness; the pulse becomes very quick, and the stomach is always affected, so that the patient is either sick, or loathes food. The skin, except about the feet, almost from the first feels hot to the touch of another person, though for some hours the patient complains of cold; afterwards she feels hot, especially in the feet and hands; the pulse is very frequent; she is thirsty, has no appetite, has a

white slimy tongue, is sick, and occasionally vomits phlegm or bile, or is plagued with wind. She does not sleep, but rather slumbers, and is troubled with dreams and visions, and talks during her slumber. Generally she complains of throbbing, often of confusion, but seldom of continued pain in the head. She has no fixed pain nor tension in the belly, but complains rather of flying stitches or griping. The bowels may be either bound or loose, but in both states the stools are foetid and dark coloured, and occasionally laxatives operate early and powerfully. The lochial discharge is not necessarily obstructed, nor does the secretion of milk suffer, in many instances, for several days. The eye and the countenance are nearly natural. The belly sometimes in the course of the disease becomes full and soft, as if the bowels were enlarged, and it may happen that this increased size continues for life. These symptoms may be complicated with others proceeding from nervous irritation, such as palpitation, starting, &c. or with those indicating local disease. When pain is felt very frequently, though not very permanently, and is perceived on pressing the lower belly, or on turning, or on making water, there is reason to apprehend more or less inflammation of the womb, and probably mat-

ter may be, in the course of a fortnight, discharged with the stools, or from the womb.

This fever may be caused by exposure to cold, by irregularities of diet, by costiveness in the end of pregnancy, or after delivery, and usually appears within eight or nine days after the birth of the child.

The most useful practice, in this disease, is on the first attack to administer ten grains of ipecacuanha, so as to produce gentle vomiting, and afterwards, when the stomach is settled, encourage a gentle moisture, by means of tepid drink, such as barley water, gruel, or tea. Then, in a few hours, we give a dose of rhubarb and magnesia, to remove the offensive matter from the bowels. This being accomplished, if there be griping, or a tendency to purging, an opiate clyster is next to be given, and repeated every night until the bowels are less irritable, taking care, if they become costive, or the stools are foetid, to interpose occasionally gentle laxatives. The diet must be very light, such as beef tea, chickenbroth, calves-feet jelly, arrow root, and ripe fruit, if there be no tendency to purging. Ginger wine with water, forms an excellent beverage, and in the course of a few days, one or two glasses of Madeira wine may be allowed, unless it produce heat and restlessness. In general it agrees well, is very grate-

ful, and inspires a feeling of comfort and strength. When the tongue becomes cleaner, five or six grains of powder of colomba, given four times a-day, are of service. If there be much nervous irritation along with this disease, the camphorated mixture is useful. In those cases where pain is felt in the lower part of the belly, the most speedy attention must be paid to it. The treatment consists in procuring a copious perspiration, opening the bowels, fomenting the belly, or if the symptoms be more acute, blood-letting and sinapisms, or some other external application, may be required.

There are other fevers and diseases occurring in the child-bed state which are attended with great danger, which it would be improper in a work of this kind to describe, because such description might have a bad effect on the imagination in the irritable state of lying-in, and also because no person ought in such cases to delay procuring the best advice. It will, however, I think be of great utility to add this general advice on the subject, that no fever is free from danger, and therefore no fever should be neglected; that fevers attended with pain in the belly, or obstruction of the lochial discharge, or vomiting, or much headach, or tendency to delirium, are

peculiarly dangerous, and require prompt assistance. Shivering fits, succeeded by these symptoms, require immediate attention.

CHAPTER XII.

Of Worms.

WOMEN after child-birth are frequently very much troubled with worms, particularly the small white worms, called ascarides. These produce a very troublesome itching about the lower part of the intestine, for they are entirely confined to that portion of the bowel. They also occasion want of appetite, or depraved appetite, itching in the nose, pale face, irregular pains in the belly or sides, and sometimes a difficulty in making water. If the stools are examined they may often be found mixed with slime, and worms can be discovered like small pieces of white thread. The most effectual mean of destroying these animals is to use, twice or thrice a-week, at night, as long as the symp-

toms continue, a clyster, composed of two drams of aloes, rubbed up with four ounces of mucilage and eight of warm water. This is to be retained as long as possible, and in the morning three drams of Cheltenham salts are to be taken. Or the injection may be made of an English pint of strong decoction of chamomile flowers, four ounces of oil, two ounces of epsom salts, and a dram of green vitriol.

A different kind of worm, is found higher up, having to a superficial observer, much the appearance of the common earth worm, whilst another species, namely, the tape worm is flat and jointed. Besides these there are others, some of which are very singular in their appearance, but which it is unnecessary to notice minutely. These produce generally more pain in the belly, than ascarides, and seldom any itching about the extremity of the bowel. In some cases the fits of pain and sickness are severe, accompanied with hardness and fulness of the belly, and in other instances, in no long time after delivery, very severe cholic is excited by them. The symptoms, however, are, it must be understood, equivocal, unless worms are discovered in the stools, or vomited from the stomach. The treatment is two-fold, first to give a brisk course of purgatives, which not

only forces the worms away, but by removing much of the slime of the bowels, destroys their favourite and necessary habitation. Calomel, epsom salts, gamboge, Harrowgate water, &c. are used for this purpose, and must be frequently repeated. The second part of the treatment consists in giving such medicines as are supposed to kill the worms, such preparations of iron, aloes, Indian pink, oil of turpentine, &c. but as these ought not to be employed without advice, it is improper to enter upon their consideration. Worms often exist in the bowels, without producing any obvious symptom, until they either accumulate to a great degree, or some adventitious circumstance conspires to make them give irritation, and fortunately in all such cases the worms themselves are partly dislodged, or destroyed, so that more or fewer come away, and the nature of the case is shewn.

CHAPTER XIII.

Of the Milk-Fever.

THE secretion of the milk is often accompanied with a considerable degree of fever, called the milk-fever. This is partly owing to that disturbance which is always to a certain degree excited in the system whenever a new process is established, and partly owing to the swelling or irritation of the breasts themselves. In this view it may, though of short duration, be compared to the teething fever of infants. This fever commences about the second or third day after delivery, and consists of a cold, a hot, and a sweating stage, during each of which the symptoms are so much the same with those described under the name of weed, that it is needless to repeat them. It must not, however, be supposed that the fever takes place in every instance, more than that every child has a teething fever; and even in those cases where the fever is considerable there is very little danger. There can be no difficulty in dis-

tinguishing this disease, for the breasts are full, hard and painful, circumstances which at once point out the nature of the fever. By way of preventing this disease, it has been recommended that the child be applied to the breast as soon after delivery as the strength of the patient will permit, and this is extremely proper, if the trial be made in such a way as not to fatigue her. It is also useful to procure a stool early, as I have formerly directed, and it is even proper where the patient is stout, of a full habit, and does not propose to nurse, to give laxatives more freely, in order to diminish the quantity of milk, and prevent fever.

When milk fever does take place, the treatment is very simple, consisting in giving warm drink, such as gruel or lemonade, in small quantity, during the cold stage, and applying warm flannel to the feet and stomach. In the hot stage, the curtains are to be thrown open, the coverlet taken off, and tepid drink taken to excite perspiration. In the sweating stage the perspiration, which is generally sour smelled, is to be gently encouraged, till it be universal, and the patient feels relieved, then it is to be lessened, and the management is the same as in weed. These means are to be employed to an extent, and with a degree of attention, propor-

tioned entirely to the severity of the symptoms. In slight cases scarcely any thing requires to be done, except, perhaps, giving a little tepid drink, and opening the bowels. If the room be kept warm, and the patient oppressed with bedcloathes, and obliged to drink often, especially of stimulating liquors, much injury is done; the strength is impaired, and sometimes a miliary rash is brought out on the face and breast, or the fever may be rendered continued. In all such unpleasant cases, the management cannot with safety be intrusted to the nurse or relations.

CHAPTER XIV.

Of Suckling.

IN the course of a few hours after delivery, if the strength of the patient have been recruited by rest, it will be proper to apply the child to the breast. This ought, if possible, to be done in a recumbent posture, and if the child do not fasten easily, she is not at that time to be fatigued by persisting in the attempt. If she cannot give suck lying in bed, she must sit up in the easiest way, being supported with pillows, and having the shoulders, back and breasts, completely defended from cold, both to avoid inflammation of the breast, and also to prevent a weed. Before applying the child, the nipple should be washed gently with a little spirits, and then with tepid milk and water, to remove the bitter substance which at that time often covers the nipple. The child may at first get very little, but presently the milk becomes more abundant, not as nurses suppose, because the young breath of the child brings milk, but from the excitement given by suction. If the nipple

be flat or small, so that the child cannot get hold of it, it is often of use to have it sucked by a grown up person, provided it be done very gently; for much force gives pain, and all painful sucking is hurtful; an elder child is also sometimes employed, or an elastic gum bag with a small glass bell at its mouth, is used, whilst the milk is pressed gently forward with the hand on the breast.

But if the patient have resolved not to nurse, then it is necessary to take precautions for diminishing the quantity of milk. As little liquor as possible should be swallowed, and food should be taken sparingly, unless the patient have been reduced. The bowels, unless under the same circumstance, should be kept, for a day or two, rather loose. As suction is a great mean of promoting the secretion of milk, it ought to be avoided as much as possible, and is only to be resorted to, if the breasts are very painful, and the milk do not run out; in this case, as much may be taken away as merely relieves the tension: when the milk runs out, care must be taken to preserve the breasts dry. The pain and swelling are sometimes accompanied with a degree of fever, but by avoiding heat and drink, or by a gentle natural perspiration, or slight purging, or by the milk gradually oozing from the nipple, the uneasiness generally soon goes off. Some

means have been employed to put back the milk, such as the application of camphorated spirits, cold vinegar, &c. but these are all more or less hurtful, and nothing is so safe or so proper, as simple but gentle rubbing with warm olive oil, and fomenting the breasts when they are painful, either with warm water, or warm vinegar and water.

CHAPTER XV.

Of Inflammation of the Breast.

WHEN in consequence of exposure to cold, or the pain and tension, occasioned by the retention of the milk, in those who do not, or cannot suckle, inflammation is excited, there is the greatest reason to apprehend that supuration will take place. This disease is easily known by the pain, hardness and swelling which accompany it. In some cases, the whole breast appears to be affected, in others, only one side; and in some the affection is small and superficial. When the breast inflames, it is evident that the retention of the milk must, for a time at least, increase the pain.

The first and earliest object then must be to have the breast gently drawn, either by the child or by other means, provided these attempts do not give pain, for if they do so, and the milk do not come readily, more hurt than good will then be done. The breast should be gently rubbed with the hand, and a small quantity of oil, and then a poultice applied of crumb of bread and tepid solution of sugar of lead. The patient should keep in bed, and have the breast properly supported. Spare diet and laxatives are proper. If the pain and hardness do not very soon go off, but on the contrary, the pain become more severe and throbbing, suppuration must take place, and it is to be encouraged by warm bread-and-milk-poultices. If the abscess be small and superficial, the spot soon becomes red, and at last breaks, occasioning, comparatively speaking, little distress, and scarcely giving any interruption to nursing. But if it be more extensive, and the glandular part of the breast be affected, all the symptoms are more severe, the progress is more tedious and the strength is apt to be reduced by fever, perspiration, and want of appetite. In these cases, if the abscess do not point and break soon, no good can be gained by delay; an opening should be made, so as to evacuate the matter freely. This not only gives immediate relief, but pre-

vents a farther extension of the mischief, and the foundation of future disease. The poultice must be continued for some time, in order to remove the hardness, and then the part must be dressed; but in a case of this kind, attended with so much present suffering, and having sometimes the future health at stake, no one ought to manage herself merely from written rules. I only add, that opiates are frequently useful to promote sleep, and tonics may be necessary to restore the strength. If the parts do not heal within a reasonable time, there is ground to suspect, either that the matter is not properly evacuated; or, especially if there be hardness, that the diseased part is influenced, either by some constitutional cause, such as scrofula, or debility, or by some acquired morbid action, which may require a gentle course of mercury, bark, sea-bathing, or other means for the cure. Sometimes after the abscess heals, and the breast seems to be cured, it swells a little, especially toward night. This is from weakness, and is cured by using cream of tartar, and strengthening the constitution.

If care be not taken, the breast is apt to inflame a second time, which is occasionally a much more tedious process than the first attack, and may remain long without going on

decidedly to suppuration. Poultices and fomentations, applied pretty hot, are useful.

Indurations remaining after an abscess, require much attention, lest in a course of years they come to prove troublesome. They may often be removed by the application of cloths, wet with a mixture of camphorated spirit of wine, and Goulard's extract.

CHAPTER XVI.

Of Excoriation of the Nipples.

THE nipples sometimes become tender and excoriated, and so very sensible, that the application of the child produces excessive pain. This complaint is occasioned by suckling, for if the child be kept off for a day or two, very obstinate excoriations heal up. It has therefore been projected, to cure this by making the child suck through a cows teat, fastened to a metallic nipple, and this in many cases gives at least considerable relief, and ought always to be tried. It is likewise of service to keep the nipple dry and cool, for which purpose, rings of lead are frequently worn. The application of lotions repeatedly

in the course of the day, is also productive of great benefit, such as ten or fifteen grains of white vitriol, or of alum, dissolved in four ounces of rose water; or an infusion of galls; or laudanum and water, in such proportion as not to smart much; or opium dissolved in white wine; or brandy and water; or port wine, &c. These must be frequently varied, for the same lotion soon loses its effects. Before the child be applied, the nipple should be gently, but carefully purified by bathing with water.

The application of astringent washes to the nipple for some time before delivery, is often useful to those who are subject to this complaint.

Instead of superficial excoriations, there may be deep chops or ulcers on the nipple, bleeding when sucked or moved, and producing intolerable pain. They require to be dressed with strips of fine caddis, spread with spermaceti ointment. These are to be kept constantly applied, except merely when the child is sucking, which ought to be as seldom as possible. Applying with a pencil, a weak solution of blue vitriol; or a mixture of cream and Goulard's extract; or an infusion of nightshade, is sometimes of benefit. It is needless to say, that all these should be washed off before the child be al-

lowed to suck. If the ulcer be obstinate and extending, the nursing must be given up, otherwise the nipple may be for ever lost.

The pain and retention of milk, and sleepless nights, produced by sore nipples, may excite either weed, or inflammation of the substance of the breast.

When a hired nurse, has chops or small ulcers on the nipples, and the child has similar sores on the lips or tongue, an experienced practitioner must be consulted,

CHAPTER XVII.

Of the Choice of a Nurse.

I AM next to notice some of those circumstances which render it impossible, or inexpedient for the mother to suckle her child, and the qualifications required in a hired nurse.

Those who have scarcely any milk in consequence of profuse floodings, of previous illness, of child-bed diseases, or of some

natural deficiency, or of the milk constantly running out at the nipple, instead of collecting in the breast, evidently cannot propose to nurse. In most of these situations the attempt would be highly injurious to the mother, and perhaps fatal to the child.

Those who are of a delicate constitution, those who are easily fatigued and worn out, those who though not actually consumptive, yet have a tendency to become so, ought not to endanger their health so far as to suckle the child.

Those who, trying to become nurses, find that the duty is more than they can perform, that they are tormented with headach, weakness of sight, inflamed eyes, loss of appetite, sleepless nights, cough, continual pain in the back, &c. will do well to relinquish at once a task, which they cannot without great imprudence undertake.

Others from the irregularity of fashionable hours, and the various and fatiguing engagements and amusements in which their time is consumed, have neither leasure nor ability to suckle their offspring. Now, as it is always right of two evils to choose the least, it is certainly better to hire a nurse than endanger the life or the future health of the infant, by giving it milk, bad in quality, and deficient in quantity. This rule will apply still

more forcibly, to those unhappy mothers who have become addicted to the miserable and depraved practice of private drinking; a vice, which melancholy experience proves, not to be confined alone to one class or rank in society.

In a few words, wherever the parent is injured by giving suck, or the child is stinted in nourishment, or hurt by the quality of the milk, it becomes a positive duty to procure a nurse.

In the choice of a nurse, there are different qualifications to be required. The first and most obvious is, that she have plenty of milk; next that her milk be good. These are however points, which are not always easy to be at once determined. Doubtless, small and relaxed breasts indicate, that there cannot be an abundant supply; but on the other hand, a contrary appearance is not always a proof of plenty; even the inspection of the nurse's child is not a criterion, for it may have been fed. But where favourable circumstances are met with, and the woman is stout, active and healthy, there is very strong reason to expect, that she will make a good nurse. As to the quality of the milk, that cannot always be determined by inspection, for milk having the same appearance, may be laxative, binding, or flatulent. It is there-

fore proper to make a provisional agreement with the nurse, that if her milk prove deficient in quantity, or exceptionable in quality, she cannot be continued. Much depends on the nurse's looks and temper, for an open countenance, and chearful, lively disposition, always bespeak a treatment more pleasant and useful for the child, than a dull, melancholy, or sulky expression, and slow, careless or inactive habits.

There is a prejudice against employing a woman who is nursing her first child, because it is uncertain how she may turn out. But as the history of those who have had many children cannot always be faithfully obtained, there is, I believe, as much uncertainty in the one case as in the other. A stronger objection is, the want of experience in the management of a child.

A very young nurse may be supposed to be thoughtless, and sometimes may be more delicate than one between twenty and thirty years of age, whilst one elder, on the other hand, has a greater chance of losing the milk. It is scarcely necessary to say, that the nurse should not have been long delivered, for if she has already been nursing for many months there is less security of her milk continuing a sufficient time. It is also always better to employ a nurse who has been regularly sucked

by a child, than one who having lost her child, has kept up the secretion by milking the breast, or by being only occasionally sucked. In this case, the milk is changed in quality, and may not perhaps return in the former quantity and perfection. It is likewise proper that the nurse, as far as can be determined by inquiry and examination, be free from hereditary disease. Whether disease may be communicated by suckling is a disputed point, but no one in a matter of so much importance would wish to run any risk. It has even been proposed that mothers who labour under such diseases should employ another nurse. This is less clear, however, for every peculiarity of constitution that the mother is capable of giving, may be supposed to be already communicated to the child in the womb. But this is a point, in which individuals must judge for themselves. Lastly, it is of importance to determine the character and conduct of the nurse, as much, and lasting misery, may be entailed upon a child, by an unprincipled and dissipated woman; and amongst other vices, a propensity to tippling is one, which cannot be attoned for, by any property, or collection of properties.

BOOK III.

OF THE MANAGEMENT AND
DISEASES OF CHILDREN.

CHAPTER I.

Of the Management of Children.

SECTION I.

AFTER the child is born, the first thing to be done, if it be lively, is to separate it from the mother, as I have formerly noticed. But if it do not cry or manifest signs of life, this is to be done with greater hesitation. Children do not breathe in the womb, but have that function compensated for, by the circulation of the blood, through the after-birth, by means of the navel-string. Now, if after being born, the child do not breathe, gasp, or cry, then, after ascertaining that the face and mouth are not covered with the membranes, and that the navel-string is not encircled round

the throat so as to prevent breathing, the next thing for consideration is, whether it is still deriving any assistance from the after-birth, for if so, removing the child would be a fatal step. This we know, by taking the navel string between the finger and thumb; if a beating or pulsation be felt, the circulation is going on, and as long as that continues, the cord ought not to be tied. There may be exceptions to this general rule, but of these exceptions, nurses and attendants cannot judge, and therefore to them, the rule is absolute. The child is to be kept warm below the cloathes, except the face, and is to be rubbed with the hand, particularly over the breast. If it begin to breathe soon, and give one or two convulsive struggles, there is seldom any risk; it will speedily cry aloud, and may then be separated. But if it do not breathe, and the pulsation in the cord stop, then, after this, no good can accrue from letting the child remain in that situation; the cord is to be tied and cut; or, if the pulsation stop immediately after the birth of the child, it is not to be continued connected to the mother. In either case, whether there never was pulsation discernible, or whether there was at first pulsation, but that have now ceased, the child is to be immediately removed, and measures used for restoring ani-

mation, unless there be evidence from the putrid appearance of the child or cord, that it has been long dead. These means consist chiefly in preserving the heat, and endeavouring to produce respiration. The first is done by immersing the child up to the neck, in lukewarm water, or covering it with warm flannel until that can be procured. The second is effected by such means as tend to rouse the system in general, such as friction with spirits over the body, the application of some stimulant to the nostrils, such as vapour of hartshorn, and giving an injection of warm water with a little salt, but chiefly by endeavouring directly to excite the function of respiration, by inflating the lungs with air through the nostril of the child, which every midwife is instructed how to do. These means sometimes are successful, but much more frequently fail.

Children may be still-born, in consequence of various causes, such as pressure on the navel string, during labour, so as to obstruct the circulation; long continued labour after the waters are drained off; or from remaining long with the head pressed in the bones of the mother; besides other causes connected with the state of the child itself, inducing actual death before delivery, or unfitting it for breathing after birth. In those

cases, where the head is, from long pressure during labour, misshapen, and the pulsation remains in the cord, it has been proposed to cut this, and let it bleed a little to relieve the head; but this, which forms the exception to the rule above mentioned never to cut the cord while the pulsation remains, is a practice which should only be adopted under the direction of a skilful judge, and generally it is better, rather to open one of the arteries in the cord, than to divide it completely.

It thus appears, that there are chiefly two states of still-born children. In the first, the cord is beating, the circulation is going on, and the after-birth is supplying the place of the lungs. In this case, cutting the cord is destroying at once the function, which is in the meantime equivalent to breathing, and which is preserving the child; one of the arteries in the cord may be opened as we would a vein, in bleeding a grown up person, and the child may thus be bled, but upon no account is the whole cord to be cut. In the second state, the pulsation has stopped, the child does not breathe, and neither does he draw any benefit from the after-birth. He has nothing to supply the place of breathing, and therefore, this case is much worse than the former. The cord may without injury be divided and our only resource is in the use of artificial breathing.

SECTION II.

BUT fortunately these means are seldom required, and the child in a few seconds after birth, cries and breathes freely. On being separated from the parent, the first thing to be done, is cautiously to wash off the white crust which covers the skin, by means of a little soap and lukewarm water. The child being cleaned, a small bit of soft rag is next wrapped round the navel-string, and a band is wound round the belly. This ought not to be very tight, otherwise, it will give uneasiness, and impede the breathing. Its chief use is to keep the navel covered, for it has in general very little effect in preventing rupture at the navel. After this, the child is to be dressed, a process, which it is not necessary to describe here. I have only to observe, that the dress ought to be loose, and made to tie with tapes, as pins are dangerous. Almost every child cries on being dressed, and therefore, it is desirable to have the dress so contrived as to consist of as few pieces as possible, that it may be speedily put on. Formerly, children used to be bound up tightly in their cloathes, so that they could scarcely move. This practice prevailed very early in this

country. In one of Mr. Strutt's plates of antiquities, there is a view of a lady's bed-chamber, in which there is a child, as formally bandaged as if it were a broken leg, newly out of the hands of a surgeon. How injurious this must be to the health, need not be told. One practice, somewhat similar, is still adopted by many nurses, namely, before the child is laid in bed, to wrap its cloathes pretty firmly round the legs, and then secure them with a pin. This confines the limbs, and makes the infant uneasy. Children should be washed morning and evening with tepid water for a fortnight, and then it may be made gradually perfectly cold. Their linen and cloathes should be very frequently shifted. How often do we meet with little infants, merely from sloth or ignorance, wearing the same dress for days, and rendered disgusting both to the sight and smell. Scarcely any other care or advantage can prevent the child from suffering, when cleanliness is neglected.

Attention should be paid to keep the child dry, and the cloathes ought to be immediately removed when soiled or wet; the child should also be wiped with a soft sponge, dipped in water. It is wonderful how early an infant may be taught to void the urine and stools at proper intervals into a pot.

The temperature in which children are

kept should be regulated. It ought never to be below that which is agreeable to an adult. By exposure to cold air, the infant is apt to have cough, or stuffing of the nostrils produced; on the other hand, warm apartments, and especially a neglect of a circulation of air hurts the health, and makes him liable to fits.

When laid to rest, the quantity of bed-cloathes must be determined by the season; and as his dress is warmer through the day than that used at night, he must when asleep be more lightly covered during the day.

A crib is the proper bed for a child. Cradles are hurtful, as the rocking is often carried to a dangerous degree, and, besides, they are so confined, and generally so closely covered, that the child breathes an impure air.

Infants sleep much at first, and ought not to be disturbed; in this respect, they may be left to their own propensity, and as they grow older, they sleep less. The only point to be attended to, when they become so old as to have the sleep regulated, is to prevent their sleeping so much through the day, as would make them restless at night.

A certain portion of exercise is necessary for every animal, in order to preserve health. For a week or two the mere washing and dressing of children, and the motion which

they from time to time make with their arms and legs, is productive of sufficient exertion. By degrees, they may be tossed or dandled a little, and ought to be occasionally placed on the bed to allow them to kick, and move their arms freely. When they are able for it, they should be encouraged to creep on the carpet, and even when two or three months old, the feeble and unavailing attempts they make to move, or to raise themselves are useful. At all periods preventing free motion, or confinement long to one posture, is hurtful, both to the shape and the health.

The age at which infants may be taken out, depends much on the season. In warm weather they may be carried out a little, when a fortnight or three weeks old, but in winter they must be older.

It is of great consequence to have children much in the country. It is a mean of preventing debility of constitution, disorders of the bowels, and fevers proceeding from that source. If this be useful for every child, it must be still more so, for those who are delicate; they ought to spend, if possible, the first years of life in the country.

It is too customary with the nurse to give to children soon after birth, sugar and water, salt and water, or magnesia, to open the bowels. None of these are generally ne-

cessary, and they may often be hurtful. If the child be applied early to the breast, the milk at that period being laxative, will open the bowels sufficiently, and carry off that green, or black looking matter, which is called meconium, and which exists in the bowels of every infant. If however, the child do not get the breast, or be fretful, moan, or start, it may be useful to give a little magnesia, or manna; more active medicines ought not to be given without advice. No doubt, great attention is required to the state of the bowels, but this may be overdone, and a healthy child certainly very seldom requires interference. After the meconium is purged off, and the child sucks freely, the stools become yellow, or orange coloured, of a consistence neither firm on one hand, nor watery on the other, but somewhat like thin pudding, and rather of a curdled appearance. The smell is slight and different from that exhaled by the stools at a more advanced period of life. The number of stools in twenty-four hours varies with different children who are equally healthy; some have seldom more than one, others above four, for many weeks. When the stools change their appearance from that described, and have an offensive smell, then the bowels are certainly disordered, and must be attended to.

A thriving child has natural stools, sucks freely, cries little, sleeps well, has a clear, firm, sound skin, occasionally covered with red specks called gum, and gradually improves in strength, bulk, and liveliness. All infants when asleep, are apt to turn the eyes involuntarily, and start a little; but an infant who is not thriving, or who has some complaint, starts in general, a great deal, rolls the eyes much, cries often, or moans, and lies in a state half asleep, from which he awakens usually with a mournful whine. He does not suck well, the stools are ill smelled, and changed in appearance, generally increased in number, and the skin becomes loose, and often has a dirty appearance.

SECTION III.

It is too much the practice, to give children food or drink, before putting them to the breast, on the principle of supporting them until the milk come. Doubtless, in cases, where the mother is a bad nurse, or long of having milk, this may be required; but where she has milk in the usual time, it is not necessary. Infants do not suffer so much from want of nourishment immediately after birth, as they do when deprived of the

breast for the same number of hours, after they have once sucked. The young of no other animal requires to be fed before sucking the mother; and, if infants be applied early to the breast, they will not require it either. If any thing, in spite of this, be given, it ought to be merely milk and water. Panado, gruel, &c. may disorder the stomach; and were parents to consider the matter, they would generally find, that the quantity of food given, though enough to do harm, and give the child gripes, is too trifling to have been of any use.

No food is so proper for the child, as the mother's milk, and where she has plenty, and the milk agrees with the infant, it ought to constitute the sole support for several weeks. Afterwards, it is proper to give a little meat, first once, and then twice a day, in order to accustom the stomach to digest a different food, previous to weaning. Panado is generally employed, but this is apt to sour, and produce complaints of the bowels; arrow root is much better, but the diet of children in this respect, I shall immediately consider. Infants generally suck greedily, and if allowed, would gorge themselves, and injure the stomach. The mother, therefore, ought not to become the slave of the child, and especially, ought not to allow him to sleep all night

at the breast. Children may early be taught to suck at regular intervals, and never should be indulged as often through the night as through the day; this breaks the mother's rest, is apt to hurt her health, and generally injures her as a nurse; one suck late at night, and another early in the morning, will be quite sufficient.

The time at which a child should be weaned, depends much on his health, and on circumstances connected with the nurse. A delicate child requires to be nursed longer than one who is stout; and where there is reason to suspect a tendency to particular complaints, connected with weakness of constitution, or where children suffer from teething, or former children have suffered from weaning, it will be right to continue the nursing for near a twelvemonth. But where the child is vigorous, he may be weaned at nine months, or even earlier, if any particular circumstance require it. When the milk disagrees with the child, producing either costiveness or looseness, or when the health of the mother is suffering, then the child must either be weaned, or have another nurse provided, according to the state of his own strength.

In all cases, the change ought to be made gradually, the child receiving more food, such as arrow root, biscuit meat, calves-foot-jelly, beef-tea, &c. and less milk for some

time previous to weaning. It will also be of advantage to accustom him for a few weeks to have no suck early in the morning; nothing from bed-time, till an early breakfast. Many give drink through the night, which is merely a bad practice. By giving food three, or even four times daily, and lessening the quantity of milk gradually, as the other diet is increased, children very seldom suffer from weaning. The great cause of injury is, the change of diet, which produces disorders of the stomach and bowels, and this, it is evident, cannot be so effectually prevented by any method, as making the change gradually.

The practice of giving a child toddy, or laudanum, &c. to make him sleep, when he is weaned, is very hurtful, as these injure the stomach and bowels.

The food of a child, after being weaned, may consist of boiled milk and bread, light bread pudding, arrow root, biscuit meat, beef-tea, a little of a soft boiled egg, calves-feet-jelly, or veal soup. When the bowels are not costive, rice is also proper; and when the powers of the stomach are stronger, oatmeal porridge forms a nourishing breakfast; this is sometimes with advantage mixed with barley meal, which makes it lighter and more laxative. A little animal food should be allowed

after the double teeth come out. Wine ought not to be given to children, except by prescription. Ripe gooseberries and strawberries, &c. are useful, unless there be a bowel complaint. When the diet is proper, the child is not sick nor oppressed, and the stools are natural.

SECTION IV.

It often happens, that mothers cannot nurse, or have not an adequate supply of milk. An important question then arises, whether a nurse ought to be hired, or the child brought up on the spoon, as it is called. Whatever speculative writers have advanced, there can be no doubt, that the best and most proper food for the young of every animal which furnishes milk, is the milk of the parent. Even the milk of another animal of a different class, cannot always be digested. Doubtless, we have examples of Romulus and Remus, being suckled by a she-wolf, and what is not less extraordinary, of a leveret being nursed by a cat; but these are no objections to the general rule. Chemistry teaches us, that there is in every different animal a diversity in the proportions of the constituent parts of milk. Milk, it is well known, consists of cream, curd,

and whey; and the latter contains a considerable quantity of sugar. By standing, the milk throws up the cream to the top, and by adding an acid or rennet, it separates into the curd, and the whey; and, evaporation of the whey leaves a sweet substance, called sugar of milk. The milk of cows contains the greatest proportion of cream, and next to it that of women, then of the goat, the cow, the ass, and the mare, in the order in which they are enumerated. The curdy part is greatest in that of the sheep, then of the goat, the cow, the ass, women, the mare. The whey is greatest in that milk which has least cream and curd, and consequently is more in that of women, than of sheep or cows. The quantity of sugar is most in the milk of mares, then of women, the ass, the goat, the sheep, and the cow. It has been denied by men of eminence, that women's milk could be coagulated, or contained curd. But it certainly does contain a portion of curd, though this is small, compared to that afforded by other milk, and very tender and soft. The curdy looking matter vomited by infants consists in a great measure of viscid cream. It is a singular fact, that acids do not make the milk of women coagulate, though added to that of any other animal, they immediately form curds. Now, from what we know of the nature of

women's milk, it is evident that cow's is very different. It can be easily coagulated, both by rennet and acids, and the curd is thick and firm. It yields much butter, and becomes sour by standing. But women's milk has more whey, a very tender curd, much more sugar, and though churned, does not yield butter. When infants are fed with cow's milk, they often vomit lumps of cheese, and the stools contain much curd, and are often, from the disorder produced, green and ill smelled. A mixture of cow's milk, water, and sugar, has been used as a substitute for breast milk; but we may with more advantage dilute the cow's milk, with a third part of new made whey, and add a sixth part of sweet cream, and a little sugar. This forms a compound more nearly resembling breast-milk, though no perfect substitute has yet been discovered. Whey with the addition of cream, and a very little sugar without any milk, may also be employed. Whey contains much of the saccharine principle, and is more nourishing than many suppose. Adults have lived for many weeks on whey alone. Either of these compositions should be given lukewarm, and the child is to suck it from a pot which is contrived for the purpose. The mixture is to be made just as it is required. If it do not keep the bowels open,

more or less manna may be added in place of some of the sugar; or if it purge, then, more cow's milk may be added in place of part of the whey. Asses milk when it can be procured, is also employed as a substitute for breast-milk. In a few weeks, other articles of nourishment are employed, particularly arrow root, or biscuit meat, that is, rusk-biscuit, boiled into a pap with water, with the addition of a little salt. Some have employed ground malt, made into meat with water; or when the child is costive, ale-berry, sweetened with treacle. But the proper diet for some weeks, certainly is plenty of either cow's milk, with a third part of water or gruel, and some sugar, or the mixture already noticed; afterwards, the various articles of diet mentioned above, may be employed according as they shall be found to agree. But although it is easy to give directions in a book for rearing children without a wet-nurse, yet in practice, they are seldom found to succeed; for no composition has hitherto been discovered, which can be so easily digested as breast-milk. When the attempt is made, great attention is to be paid to the stools, and the progress the child is making. If he take the mixture freely, and be thriving, if the bowels are in a correct state, and the stools not ill smelled; or if costiveness can be easily prevented by a

little manna, and looseness by adding milk instead of whey, or using a little rice gruel; we may safely go on. But if the infant be falling off, and especially, if he lie in a dull heavy state, cry much, and be alternately bound in the belly and loose, purging offensive dark coloured stuff, there is great reason to fear, that he will be lost, if a nurse be not procured.

SECTION V.

MUCH of the present comfort and future health of a child depends upon the nursery maid. Amongst the qualifications required in her, the following may be enumerated: First. Cleanliness in her own person, correct conduct, with a chearful obliging temper, patience, steadiness without harshness, and a method in all her arrangements. Second. Attention to preserve the nursery well aired, to regulate the temperature, so as to avoid either cold or excessive heat, and to have the cloathes always dry and clean. Third. Prudence in the diet of the child. Fourth. A perfect obedience to rules and orders, some of which may be deduced from the following remarks.

A child in health, ought naturally to cry

very little. Although the temper and abilities of children, are not altogether under the controul of parents, yet they may be greatly improved. It is absurd to pretend, that a child is inferior to a puppy, and yet a puppy may be early rendered docile and gentle, or sulky and ill natured, according as he is educated. I wish to impress deeply on the mind of parents, that they have it greatly in their power to regulate the disposition, as well as to influence the health of their offspring. A child does not cry, unless uneasy from hunger, want of sleep, pain, or some inconvenience. Bodily uneasiness will, with any child, affect the mind, rendering it peevish and irritable, and presently, causes, which may be called mental, will do the same. For, a child is not merely an animal machine, he has also a mind capable, very early of feeling various passions. Some children, we know, are chearful, good humoured, lively, and little disposed to be petted or fretful, when denied what they wish. Others equally healthy, are perpetually crying, passionate and cross, if they do not instantly obtain what they desire. Peevishness and crying, cannot, when the child is sickly and uneasy, be prevented; but even in such cases, a prudent nurse can greatly diminish this disposition. In health, however, it is much to be feared, when these pro-

pensities exist, that the fault lies originally and chiefly with the parents; nor is it altogether foreign to the design of this book, to call their attention to this point, so intimately connected with the present comfort, and future happiness of children. I cannot, however, enter fully into the subject, though I offer the following observations.

First: It is of the utmost importance in early infancy, to prevent pain, and as far as possible to remove every distress and sickness, on its first appearance.

Second: Children should be prevented from feeling any painful degree of hunger.

Third: Proper means are to be had recourse to, for preserving the bowels in a correct state, and preventing griping, and cholic pains.

Fourth: A due and necessary portion of sleep must be encouraged; and when awake, such a degree of exercise must be given, as is useful for promoting liveliness.

Fifth: When children begin to notice, and to be attracted by sounds and objects, the nurse ought to sing in a chearful and lively strain.

Sixth: We should present, and take away, in a chearful and amusing way, objects which attract the eye, by which the child is early

taught to receive, and readily part with, what he desires.

Seventh: It is to be recollected, that a child has a mind, endowed with gradually unfolding powers and passions: that when he begins to notice and desire, he becomes an object of education or training, and that the great point is, to keep away such bodily sensations, as would spoil the temper, or the soil to be wrought on; whilst the powers, weak and trifling as they are, must be occupied, and engaged, with such things as can arrest the attention, and prevent that impatience and fretfulness, which neglected children shew. If the means of doing this, should be no higher than the shaking of a rattle, or the spinning of a totum, they are not beneath the notice of those who look to the end.

Eighth: To teaze and contradict infants and children, is not the way to improve the disposition, or to teach patience; but it is not impracticable to treat them in such a way as to prevent their crying, if they do not immediately obtain, or should be deprived of, what they desire, whether that be the breast, or a shining toy. This is to be accomplished, not by stubborn harshness, always hurtful to a child, and indicating a savage disposition in those who use it, but by prudence; and perhaps, the principle of conduct may be re-

solved into the maxim of leading at first the attention to something else, by which, the habit of uniformly expecting immediate gratification, is prevented from being acquired.

Now all this is possible, without pain to the parent or child, but on the contrary, eventually, with unspeakable comfort to both. Does any child, at least any one not under the guidance of an absolute fool, ever make a practice of crying, because he is prevented from grasping the flame of the candle? No, surely; and why? because the mother or nurse never will yield to this, and very soon the child beholds the candle, without a wish to do more than look at it; yet, the very same child shall cry himself asleep, or almost into a fit, if prevented from scattering the sugar out of the sugar bason. Much of the misery, and many of the crimes of human life, have their foundation laid in the nursery; and could some of those who have suffered most for their misconduct, know all the steps which led to it, they would regret, that the seeds of ungovernable passion, of selfishness, and other vices, had been planted, before they could discern their right hand from their left. Parents, then, ought not to forget, that the subject of this paper is an important duty, binding on themselves, and that they require their utmost diligence and circumspection in the choice

of servants, who will not undo by their carelessness, folly, and mistaken fondness, all their truly valuable care.

Ninth: The practice of servants scolding children in jest, and teaching them to scold in return, encouraging them to scratch, and revenge real or pretended injuries, and to take vengeance on chairs and stones, is productive of incalculable mischief. As it is evident, that children can be early educated to evil and mischief, I hope, it will not be denied, that with equal attention, they might have been trained to good. This untoward education begins before infants can understand what is said or meant, as if it were sincerely intended, that the most effectual measures should be taken to corrupt and destroy the mind. The stupid rant, or rapid repetition of one or two words which have no meaning at all, in a tone, calculated rather to confound than enliven the child, bad as it is, is better than this. It is not foreign to the purpose to observe, that at a little later period, great pains are taken to inspire the child with a terror at the doctor, and at medicine, the effects of which are best seen, when the child becomes sick.

CHAPTER II.

Of Connate Diseases, &c.

IN considering the diseases of children, I shall begin with those which exist at the time of birth.

SECTION I.

ONE of the most frequent of these, is the flesh mark, or redness on the skin, resembling a stain with a bramble. This may occur on any part, the face, the body, or the fingers. It has been attributed to the effect of the mother's imagination, or to a fright, but without any sufficient cause. It is met with when no such circumstance has occurred; and on the other hand, it is wanting in those cases, where, if this had the supposed effect, we would chiefly expect it. The mark may be more or less extensive, and of different shades of colour. It is generally level with the skin, but sometimes is elevated above it, and in every case where it increases,

it does, eventually, become elevated. It proceeds from the collection of a great many blood-vessels, by which the structure of the part is altered. By pressure, the redness disappears, for the blood is forced out, but it immediately returns. When it becomes elevated and enlarged, then there is an evident pulsation in the part; it grows with more or less rapidity, at last bursts, and discharges sometimes an alarming quantity of blood.

Pressure applied early, when the mark is on such a part as to bear it, is frequently an effectual means of removing it, or at least of preventing all tendency to enlarge. The application of some stimulant or astringent to the part, if it be small, the cuticle being previously removed by a mild blister, and also, occasionally employing pressure, may be useful, but this practice ought not to be undertaken without advice. In bad cases an operation may become necessary.

SECTION II.

HARE-LIP is so well known, that I need not describe it. It may exist in various degrees; it may be confined to the lip, or may extend back along the roof of the mouth. An operation is in most cases necessary and useful,

by which the appearance is improved ; then, by proper contrivances, a defect in the roof of the mouth may be supplied, and the child enabled to speak distinctly. This operation, however, ought never, when it can be avoided, to be performed till the child is a year old or more, for when resorted to early, it generally fails. In the mean time, if he cannot suck the mother, he may perhaps be able to suck a nurse who has a very large nipple.

SECTION III.

SOMETIMES the natural passages, particularly the bowels, may be shut up, the nostrils or eye-lids may be closed, or the fingers may adhere, or have fleshy attachments, like additional fingers. These cases admit of cure, only, by a surgical operation. The one generally of the most importance, is the imperforation of the bowel, by which the stools are prevented from passing. A surgeon can often determine, whether the passage be merely covered, or the bowel be deficient, or whether the stools are retained by some indurated mucus. It is evident, that if relief be not obtained, death must soon take place, and perhaps some children have died from this cause, without any suspicion of the real nature of the case.

An operation is in some instances exceedingly simple, in others it is more hazardous, and very uncertain in the result; but even in the worst cases, an opening can be made into the bowel higher up, and then a chance of life is given.

When a child does not make water, the use of a silver probe will ascertain whether there be any obstruction, and if there be not, it promotes the discharge.

SECTION IV.

WHEN the tongue is fastened to the lower jaw, too near the point, the child cannot suck easily, nor can he afterwards speak distinctly, the motion of the tongue being impeded. This is a very rare case, for generally the fault is in the nipple or the nurse, rather than the child. If the tongue is not bound down, and if the child suck the finger when put into the mouth, there is no reason for saying he is tongue-tied. The operation, where it is really necessary, is very trifling, but if incautiously performed, the artery below the tongue may be opened, and much blood lost. When the tongue is not sufficiently tied down, or too loose, it has been supposed that it might be turned back into the throat, so as to suf-

focate the child; of this, I have never known any instance.

SECTION V.

DEFORMITIES may occur in almost any part of the body, but they are more frequent about the feet than elsewhere, inducing what is called club-foot. This may exist in different degrees, and with various complications, rendering the cure more or less difficult, or impracticable. In every instance, immediate attention ought to be paid; for, as the extremities of the bones and joints of infants are soft and pliable, gentle and continued efforts, by means of suitable bandages, and contrivances to bring the parts into the natural shape and situation, will then be much more effectual, than if delayed. And indeed, after a certain lapse of time, no skill can cure a deformity, which, soon after birth, might have been easily removed.

Growths upon the back bone, are very dangerous, and when the tumour is covered with a red or livid skin, thin like that of the lips, and part of the spine is deficient, there is no great chance of the child living above a few days, though sometimes he exists for months; or, in a few cases, for some years in a misera-

ble and paralytic state. The tumour, sooner or later bursts, and water is discharged, but the infant may die, even before this take place. It is to be covered with a soft cloth, to defend it from injury, but scarcely any application can be of service.

SECTION VI.

RUPTURE, or a tumour about some part of the belly, occasioned by the protrusion of a portion of the bowel, is not an uncommon occurrence. The kind, which is in general, most immediately dangerous, is that which takes place at the navel; where a great part of the bowel may be forced out, covered only with a very thin and almost transparent skin. If this be so large, that the intestines cannot be pressed back, the child generally dies, in consequence of the tumour inflaming, or going into mortification. But, if the bowel can be pressed back, and, especially, if the skin of the tumour be not very delicate, there is no risk. The application of a compress, and suitable bandage round the belly, keeps the intestine in its place, and in the course of some time, the aperture closes so far as to prevent the protrusion. This complaint is supposed to be owing to the child

crying much, when the navel is unsupported, but this opinion is not always correct.

The bowels may also protrude at other places, particularly at the lower part of the belly, and the case is distinguished by the tumour disappearing on pressure. A bandage cannot easily be applied with effect, to so young a patient, though it is still worth a careful trial,

SECTION VII.

A MORE formidable case, is that, where the heart is not properly formed, or does not perform its functions correctly. In slight cases, the symptoms do not come on for a considerable time after birth, perhaps not for months, and then they gradually increase. But in those instances where the malformation is considerable, they appear from the first, and either carry off the child in a day or two, or a miserable existence is prolonged, according to their severity. The symptoms in the worst cases are coldness of the extremities, a livid appearance of the lips, fingers and toes, and indeed, a blueness or purple colour, of the whole skin. The child lies in a dull moaning state, seems to breathe with difficulty, has even occasionally violent fits of suffocation, and

generally in such cases dies soon. Where the disorder is slighter, he seems at times to be tolerably well, but the skin has never a clear florid appearance; on the contrary, it is of a bluish or tallowy look. There is a suffocating cough, sometimes resembling whooping-cough, and a quantity of phlegm comes into the mouth. During the cough, and also at other times, when the child is quickly moved or cries, the skin becomes purple, the face leaden coloured, the nails dark blue, and the infant seems ready to expire. But after a little rest, or respite, the dangerous aspect gradually abates, and the infant is restored to a quiet state. This is a case, which is very little under the controul of medicine. The bowels are to be preserved in an open state, and the child kept as quiet as possible. Three or four drops of the sweet spirit of nitre, and two of tincture of hyocyamus, may be given to an infant, four times a day, which appear to diminish the quantity of phlegm, and make the fits of suffocation less frequent. There may be some deviations where nature can effect a cure, but in general, the termination is unfavourable.

Dropsy of the pericardium, or a collection of water in the bag which incloses the heart, may exist at birth, and is productive of very fatal effects. The child from the first, ap-

pears to breathe with difficulty, perhaps he is nearly still-born. He cries in a very low tone, is much oppressed, and subject to violent motion of the ribs, and deep stertorous breathing, or fits of suffocation. The skin is constantly of a leaden colour, the extremities generally cold, and no pulsation can be felt at the wrist, perhaps, none even at the heart. He does not suck, can scarcely swallow, struggles often, and on looking at the face, it appears as if he were crying violently, and yet he is making little or no noise. Sometimes he has slight fits, and generally he dies within three days after birth. This is a complaint too often incurable, for the child does not live long enough, to benefit by the operation of such medicines, as can carry off the water.

SECTION VIII.

CHILDREN in consequence of a tedious labour, or other causes, have sometimes a considerable swelling on the head. The edges of this swelling are hard, and the middle soft, so that an inexperienced person would suppose, that the bones of the head were deficient at that part. A cloth dipped in equal parts of vinegar and brandy, may be applied morning

and evening, but I believe, the swelling will always go off, even without any remedy. I mention it merely to prevent uneasiness. Marks or furrows on the head, are equally trifling.

The breasts of children, sometimes swell and inflame, especially if attempts be made to press out forcibly, a milky fluid which they often contain. Gentle rubbing, with warm oil, is useful; and if from mismanagement they should suppurate, which indeed rarely happens, a bread and milk poultice is to be applied, and when the tumour bursts, the part is to be dressed with simple ointment.

A swelling in the scrotum of male infants, from water, is sometimes mistaken for rupture. But it differs in being elastic, and it cannot be made to disappear by pressure. If it be placed between the eye and a lighted candle at night, it will be seen to be transparent. It is not attended with danger, and generally goes away by the repeated application of clothes dipped in a solution of two drams of sal ammoniac in eight ounces of water.

From neglect, or from a bad constitution of the child, the navel, sometimes, after the cord drops off, becomes very tender, and excoriated, giving a good deal of trouble. Great attention is to be paid to cleanliness. It is

to be bathed twice or thrice a day, with infusion of chamomile flowers, and afterwards with a solution of ten grains of white vitriol in six ounces of rose water. A bit of singed rag is usually employed as the dressing, but when this sticks firmly, a little spermaceti ointment may be used. If the health be otherwise bad, care must be taken to support the strength, with breast milk, the bowels are to be kept open, and the apartment is to be well aired. Wherever there is a redness spreading from the navel, or the excoriation is considerable, or an appearance of fungus, called proud flesh, advice ought to be taken.

CHAPTER III.

Of Squinting.

SQUINTING can never, unless from disease, become an object of attention, till the child be old enough to notice. It generally proceeds from the two eyes being of unequal power, so that they cannot both discern the same object; and therefore, the weak one is turned aside, in order to avoid confused vision. This cause is ascertained, when the child is a year or two old, by holding an object to the two eyes in succession, and observing if it be seen distinctly at unequal distances. Squinting may also be produced, by particular conditions of the muscles or nerves of the eye; or, when both the eye and its appendages are sound, it may be caused by carelessness and a bad habit. When it comes on very early, and before the child can give any account of his perceptions, the eye which squints, ought to be covered up, for a great part of the day; and when it is opened, there should be a black, or glaring patch, fastened

on the inside of the eye, at the root of the nose, if the eye be turned outward, or made to project a little at the temple, if it be turned inwards. The sound eye ought also, occasionally, to be covered up, and the child obliged to use the imperfect one. Goggles have been employed, to make the child look straight forward, but they have not this effect, as the sound eye alone is employed. It is however, sometimes of use to employ goggles, with the opening of the one belonging to the sound eye closed up, making the squinting eye alone be used, and directed straight forward, by the position of the aperture.

Squinting proceeding from affections of the muscles of the eye, is often caused by straining the vision, and may generally be cured by covering up the weak eye for a considerable time, and being afterwards very watchful. If it arise from a shortness or contraction of one of the muscles, the eye is permanently turned to that side, and cannot be moved to the other.

When it proceeds from an unequal power of the eyes, it may sometimes be remedied by wearing spectacles, having a glass in the imperfect side, capable of making its power correspond to that of the sound one, which is to be unfurnished with a glass. This can

only be practised with those who are somewhat advanced in age. Spectacles always look better than a squinting eye.

When a child squints only occasionally, or even frequently, but has the power when he chooses of directing the eyes to the same object, it is always possible to cure him; often merely drawing the hand over the eye, when he squints, and keeping a constant watch, will be sufficient.

CHAPTER IV.

Of Ophthalmia.

CHILDREN within a few days after their birth, in consequence of exposure to much light, or a strong fire, or from other causes, some of them operating during delivery, have sometimes inflammation of the eye. The eyelids swell, and their inside, as well as the white of the eye, becomes red, and covered with a quantity of yellow purulent matter, which comes out at the corner of the eye,

and hardening, tends to glue the lids together. In some cases, the eye-lids are little swelled; in others their inside is turned out, especially when the infant cries. If this be neglected, specks may form on the eye, or the disease may be communicated to the eyeball, and suppuration take place within, destroying vision for ever. In a case of this delicacy, advice ought always to be early procured, for internal medicine may occasionally be required. External applications are best made by using a small syringe, with which the eye-water is gently squirted within the eye-lids. Four grains of white vitriol, dissolved in as many ounces of rose water, will be a very proper application to begin with. When the inflammation is high, a leech applied to the temple does good, and the child should be purged; if it do not abate in a few days, a drop of vinous tincture of opium, introduced into the eye, morning and evening, will be useful. At a more advanced period, inflammation may occur from accidental causes, and ought to be removed early. When it does not speedily yield to bathing the eye, with the solution of vitriol just mentioned, or of sugar of lead in the same proportions, the eye should be carefully inspected, for there may often be an opacity beginning at the edge of its clear

part, or cornea, or perhaps, over the pupil of the eye. I need not point out the practice here, as a surgeon must be consulted, and parents ought not to refuse to allow the vessels to be freely and repeatedly scarified, and some smarting remedies to be used, if this should be thought proper; for by their timidity, the child may become blind or disfigured.

Long continued, or frequently returning, inflammation of the eye, with soreness of the eye-lids, and the excretion of a thick humour, which makes them stick together in the morning may be greatly relieved or cured, by applying with a camel's hair pencil, a drop of vinous tincture of opium, into the eye, four or five times a day; anointing the eye-lids with the ung. hyd. nit.; occasionally scarifying the distended vessels; keeping the bowels regular; and using the sea bath, in the proper season.

CHAPTER V.

Of Cutaneous Affections.

SECTION I.

YELLOW gum is merely a species of jaundice, but is in general of very short duration. It affects most children in a greater or less degree, and usually appears within a week, or much earlier after birth. It proceeds from the absorption of bile, and is known by a yellow colour of the skin, or even of the eyes, and is preceded, and attended by sleepiness, and careless about sucking. It requires merely a purgative, such as a little calcined magnesia; or solution of manna.

A more serious disease of this kind, is distinguished by the severity of the symptoms, for besides the yellow skin, there is a great degree of oppression and moaning, interrupted by cries proceeding from cholic pain, sometimes by cough, and not unfrequently by convulsions. The stools may either be dark

coloured, or more pale, and this last is the worst kind of the disease. The proper practice is to give three grains of ipecacuanha, to act as an emetic, and then half a grain of calomel, and a grain of magnesia, morning and evening, or three times a day, in order to induce purging; taking care however, not to carry this too far. The strength is to be sedulously supported by the breast milk.

SECTION II.

THE red gum, is an eruption which appears very early after birth, and in a greater or less degree for some months, changing however its appearance, as it recurs at different ages. The red gum of infancy, consists of a number of small, red, elevated spots. The top is clear, and the base is of a vivid red. This eruption is scattered over the trunk of the body, and sometimes on the cheek and forehead; on the feet the spots are still larger, more distinct, and sometimes a clear fluid is found at the top. When the redness round the base is considerable, the rash has at first sight an appearance of measles, but there is no fever, nor sneezing, nor watery eye, nor cough; on the contrary, the infant is in perfect health. There is no necessity for using any medicine.

If however, the eruption should suddenly disappear, and the child be much oppressed, or have violent pain in the bowels, or a tendency to spasm, the warm bath, and a gentle laxative will be proper. If there be much oppression, three grains of ipecacuanha are to be given as an emetic; and if the child continue pale and sick, a tea spoonful of white wine posset may be ordered, every hour.

SECTION III.

THE white gum, appears after the period, at which infants are subject to the former variety; it consists of a number of white, hard, elevated spots, the base of which is sometimes, but not always, surrounded with a little redness. It resembles the itch, and is sometimes mistaken for it, but it is not infectious, nor is it itchy, unless the child be kept dirty, and the parts are irritated. It requires no particular treatment; merely cleanliness and attention to the bowels. When speaking of this eruption, I may mention, that there is also another, which still more resembles itch, though it generally is rather later of appearing than the white gum. It consists of soft, smooth, shining elevations of the skin, forming small papulæ, or eminences, differing

little in colour from the neighbouring skin. They are itchy, and if the top be scratched off, a clear water oozes out, and if the scratching be frequently repeated, they become red and bloody, or covered with a dark little scab. By washing with soap and water, and rubbing the parts three times a day, with lemon juice, the complaint may be removed, but if it be neglected, it may become similar to the itch, and require the same remedies.

The tooth-rash consists of very small red spots, or papulæ, set so closely together, as to form patches, from the size of a sixpence, to that of even a dollar, especially on the extremities; whilst on the body the papulæ are larger, more inflamed, and at a distance look like measles. This requires no medicine, unless it be a gentle laxative occasionally.

SECTION IV.

EXCORIATIONS, or a red tender state of the skin, are apt to take place about the groins, between the thighs, behind the ears, &c. These generally depend on want of attention, though with very fat children, they may sometimes occur, notwithstanding great care. At first, it is generally sufficient to keep the parts very dry, and dust them frequently with tutty, or

calamine, or levigated flowers of zinc. But if they have been neglected, and become fretted, they require to be washed frequently, with a solution of ten grains of white vitriol, in five ounces of rose water. If the skin be ulcerated, and matter be discharged, the part must also be dressed with spermaceti ointment, spread thin on soft linen.

Excoriations behind the ears may take place very early, but generally are worst about the time of teething. The part is to be kept clean and cool, and bathed twice or thrice a day, with the solution of white vitriol, or with a mixture, consisting of an ounce of water, and a tea spoonful of laudanum. If the discharge have been considerable, purgatives must at the same time be employed; or if the child be fat, and disposed to convulsions, it may not be prudent to stop the discharge entirely, at least, until he have had the bowels repeatedly opened. In obstinate cases, diluted citrine ointment, spread thinly on a rag, is a useful dressing. In very bad, and neglected cases, where the sore becomes black, and the parts in the neighbourhood are livid, and threaten to mortify, they should first be frequently touched, with camphorated spirit of wine, and then, if this do not prevent mortification, a fermenting poultice is the best thing to remove the sloughs. The strength is to

be supported by breast milk, beef-tea, and white wine whey, but it is often a fatal complaint.

SECTION V.

ANOTHER cutaneous disease is the milk-bloatch, which appears on lusty children, especially about the time of teething. It is a scabby eruption, which generally appears first on the cheeks or forehead, and then spreads over the face. The pustules are red, and the top soon becomes covered with a scab, consisting of different layers. Sometimes the pustules are large, and separate, but often they are small, and run together, forming a considerable patch. They contain a matter, something like honey. During teething, the margins are often red, and at this time thick, yellow, or brown crusts form; and when these are rubbed off, the part below is watery and dark coloured, with little fragments of scab adhering to it. Blanes are left for some time. On the body, we often observe small red spots, something like itch. The milk-bloatch is itchy, rather than painful. It generally proceeds from too full diet, or a plethoric habit, and therefore requires, not only to have the diet lowered, if the child be weaned, or the

nurse fed upon less animal food, if on the breast, but also, to have occasionally a laxative. Local applications should be used with caution ; but, if the eruption be very itchy and troublesome, and do not yield to change of diet and laxatives, it may be washed with lime water, three times a day, or with a scruple of sal ammoniac, dissolved in six ounces of rose water. In obstinate cases, ointment containing sulphur vivum, sometimes does good.

SECTION VI.

CHILDREN sometimes, very soon after birth, become covered with copper coloured bloatches, which, if neglected, end in ulceration and scabbing. The mouth and throat also become ulcerated, and the roof of the mouth may be covered, with a dusky white aphthous crust, whilst the gums discharge a most offensive matter, and look as if they were going to mortify. The child is hoarse, and cries in a low voice. The fundament becomes sore and chopped, and sometimes the eyes are inflamed, and discharge much purulent matter. Great emaciation takes place, and the child is presently relieved by death from its sufferings. This state proceeds from for-

mer irregularities on the part of one of the parents; or from infection received from the nurse, whose nipples on inspection, will be found to be ulcerated. It must, however, be remembered, that as the nurse may infect the child, so the child may have infected the nurse, and the point in many cases to be determined, is which of them had the complaint first. In some instances, the child when born seems to have suffered from the disease, being much emaciated, and his countenance like that of an ape, or an old man. Not unfrequently, he perishes, within a few weeks or months after conception. A course of mercury, given to the child, can alone cure the complaint.

SECTION VII.

ERYSIPELAS, or rose, is a very formidable disease with infants. It appears generally at an early period, commonly within a few days after birth. It begins with a hardness and redness of some part of the skin, about the belly or the extremities, accompanied with fever. The part is of a purple, or livid colour, somewhat tumid and firm. The child is restless, or oppressed, or lies in a listless state, with much of the appearance of dying.

The redness extends on the skin, blisters form, the part becomes darker in colour, and ends in mortification; or the disease continues for a time stationary, and then suppuration takes place. In favourable cases, the colour becomes lighter, the hardness abates, and the other symptoms decline. The best practice at the outset, is to dust the part with flour, and open the bowels, with gentle doses of calomel. The strength is to be supported with the breast milk, and white-wine-whey. If the colour become darker, the part is to be frequently bathed with camphorated spirit of wine. Fortunately in private practice, this formidable state of the disease is rare. It is more frequent to meet with partial erysipelatous patches, and tumours on the extremities, which generally yield to the use of calomel purges, and dusting the parts with flour. If suppuration take place, the abscess ought to be early opened.

SECTION VIII.

SICKLY children are sometimes affected soon after birth, with inflamed blisters over the trunk and extremities, accompanied with fever, and increasing debility. Cordials are proper, but in general, those alone, who had

a tolerable share of strength before the attack, recover. Blisters appear on children at a more advanced period. These may be numerous and large, but are not attended with fever. They are often met with in warm weather, on those parts exposed most to the heat. They require merely, to have the water let out with a needle.

SECTION IX.

BOILS are not unfrequent, and when numerous, always indicate an impaired constitution. They may succeed some debilitating or eruptive disease, as fever, purging, small or chicken-pock, &c. or may appear without any previous ailment. They are of two kinds, the first becomes pretty large, and contains a considerable quantity of matter; but it forms slowly, the skin is dark coloured, and long of breaking, and there is not much acute pain. There are generally, several in different stages of progression. Suppuration is to be encouraged by poultices, and the matter should be early let out. The bowels are to be kept open, and the strength and constitution improved by diet, good air, infusion of bark, &c.

The second kind is harder and flatter, has an extended stool, and the skin a livid ap-

pearance; the pain is not great, but the part is hot and itchy; sometimes the tumour discharges a brownish coloured matter, but not equal to its size. It then gradually closes up, and the swelling and hardness disappear by degrees. Others open up more, and discover a core within, which after a time is destroyed, or comes out. These are of a different nature from the former. Gentle laxatives are highly useful, and the best local application is a poultice.

SECTION X.

THE itch is a contagious eruption of small pustules, having a hard hot base, and watery looking top, too well known to require any minute description. The itching is intolerable, and the scratching produces considerable inflammation, which frequently spreads from one pustule to another, and occasionally small boils are formed on different parts of the body. It is not dangerous, if properly attended to, but if neglected, the excessive irritation is apt to injure the health. The best application is an ointment composed of an ounce of sulphur vivum, two drams of powdered hellebore, and three ounces of hog's lard, or oil of Bays. It is not necessary nor useful,

to give sulphur internally; but in inveterate cases, a course of Harrowgate water has been beneficial. It has been supposed, that with infants it was dangerous to employ sulphur ointment, and therefore, some have merely washed the child with water, in which roll brimstone had been boiled, but this is not always so effectual as the ointment. When the sulphur fails, or is not employed on account of its smell, other remedies have been used, such as a strong decoction of juniper berries, or of hellebore, or a solution of ten grains of corrosive sublimate, in eight ounces of rose water. These are to be applied as a wash to the parts, three times a day, and the strength increased or diminished, according to the effect. Hellebore ointment, or a scruple of corrosive sublimate, mixed with two ounces of lard, or ointment of nitrated mercury, have also been employed in place of sulphur ointment.

Great attention to cleanliness, and frequent ablution, are necessary during the cure. An eruption which sometimes succeeds the itch, or is excited by the friction, and which is itself not very itchy, is generally removed, simply by washing morning and evening with soap and water.

SECTION XI.

THE dry itch, is a very different disease, and is not nearly so contagious as the former. We cannot always say what produces it, but we know that negligence is favourable to its appearance. In children, it begins in different parts of the body, with small reddish spots, having a little blister at the top, which soon is converted into a thin scale, very like a bit of dried herring scale. Between the scales, which are often numerous, we may observe shining or silver-looking patches on the skin. After this eruption has continued some time, the skin, especially about the hands and feet, becomes red, as if it had been scalded, and is partly covered with scales, scabs, and scurf. In some cases, the skin of the whole body is red, inflamed, and partially excoriated, discharging a small quantity of glutinous matter, which stiffens into scales, &c. The head is always covered with scurf, and very often the nails are destroyed. The eruption is itchy. The daily use of the tepid bath, or a bath of warm sea water, or of Harrogate water, or a mixture of an ounce of sulphuret of potash (liver of sulphur), and a gallon of warm water, will be useful. Butter-

milk, lime water, solution of sal ammoniac, or corrosive sublimate, or decoction of hellebore, recommended above, are useful lotions, or the same ointment employed in the itch, may be used. If the child be grown up, it is sometimes necessary to give decoction of sarsaparilla, or small doses of calomel, or Moffat water internally. In this, and some other obstinate cutaneous diseases, corrosive sublimate, given with great caution, has done good. It was at one time much employed, in the form of a nostrum, called antiscorbutic drops.

SECTION XII.

HERPES, vulgarly called scurvy, ring-worm, wild-fire, &c. is of different kinds. The scurfy-herpes is sometimes confined, merely to the cheek, behind the ear, or to some part of the face. The skin is reddish and branny. A different form begins with a small spot which presently extends, forming a red scurfy circle, within which the skin is white. This circle gradually extends, the skin, which it recedes from, becoming white. It consists sometimes of minute vesicles, which form small scabs. These presently assume a scaly look, and the inclosed surface has a branny appearance, and is of a white colour. This is not

unfrequently met with on the head, and whenever it appears, the part becomes bald. This affection of the head is communicated by using the same comb, or by contact, and is very obstinate; great attention should therefore be paid to prevent it from spreading through all the children of the family.

The part should be early bathed, three or four times a day, with warm lemon juice, or a solution of a scruple of corrosive sublimate, and two drams of sal ammoniac, in six ounces of rose water, and then the citrine ointment should be applied. Other remedies have also been used in obstinate cases, such as mercurial ointment, sulphur ointment, verdigrese mixed with basilicon and camphor, savine ointment, &c. When the head is inveterately affected, it must be shaved. In slight cases of this disease, appearing on some small part of the face or body, a solution of corrosive sublimate, in emulsion of bitter almonds, forms a good lotion.

As this complaint is sometimes produced by full feeding, laxatives and a lower diet will be useful.

Another species, begins like small blisters, containing a thick yellow fluid. They run together, and form a cluster, which is soon covered with yellow scabs. This affection is frequent about the lips and chin, and is vul-

garly ascribed to cold. Sometimes the glands below the chin swell, and a large, hard, painful lump is formed, which may terminate in suppuration; but generally by rubbing it gently with warm oil, and giving physic, it goes off. The best application to the herpetic eruption is the almond lotion, recommended above, or lime water; or the part may be anointed with diluted citrine ointment.

SECTION XIII.

THE dandriff, or scaly head, is an affection, in which the fore part of the head is covered with a thick, white scurf, which can be removed in the form of powder. Farther back, larger scales are produced, or even crusts may be produced. This is unfavourable to the growth of the hair, which becomes thinner, and in some parts the head may be bald. The hair is to be cut or shaved off, and the head brushed daily with a hard brush, and then washed with soap and warm water. If this do not remove the disease, the solution of corrosive sublimate in almond emulsion, or camphorated oil, or sulphur ointment, may be applied, morning and evening.

SECTION XIV.

THE scald head is a different complaint, and is certainly infectious. It consists of an eruption of pustules among the hair, containing a substance like honey, and soon forming large white, or yellow scabs. This disease spreads over the head, and not unfrequently is accompanied with an eruption on the face and body, which is sometimes mistaken for itch. Unless the disease be attacked on its very commencement, it is generally necessary to begin by removing the hair, which is done by clipping and shaving, after having softened the scabs, and set free the roots of the hair by lard, oil, or the application of a poultice. This cannot be done at once, but by repeated operations, it is at length effected. Whether the hair be removed or not, we must early begin such applications as are known to be serviceable. One which is very useful, consists of an ounce of sulphur vivum, three ounces of oil of bays, and three drams of camphor. This is to be applied morning and evening. Diluted citrine ointment, or hellebore ointment, are also useful. Lotions are sometimes employed alone, or together with the ointment, such as decoc-

tion of hellebore, or two drams of sulphuret of potash, a dram of soft soap, and six ounces of water. These are to be used twice or thrice a day.

SECTION XV.

SCARLET fever is of two kinds, the mild and malignant, but no form of it ought to be entirely trusted to the management of any one, not possessed of professional knowledge. It is useful however to know, how it may be mitigated. It begins, in general, three days after the patient has been exposed to infection. It attacks suddenly in the evening, with chillness, sickness and fever, the child having perhaps, an hour before, been lively and in perfect health. The pulse is extremely rapid, the body very warm, and the feet cold, the eye dull, and the eye-lids full, and very red within. Next day, if not earlier, an eruption appears, first on the face and neck, and very soon it spreads over the body. It consists of small red specks, so numerous, that the skin looks like a boiled lobster. The inside of the eye-lids, the nostrils, lips and tongue, are very red. On the fifth day, the eruption declines, and goes wholly off by the seventh. In general, this affection is attend-

ed with sore throat, which is often produced, even before the fever appears. The tonsils, or almonds of the ear, as they are called, are red, and soon become covered, with a white or ash coloured slough, whilst the neighbouring part becomes of a dark red colour. These sloughs sometimes continue for a week. It is unnecessary here, to be more particular, for no one, if attentive, can mistake the disease. In the more malignant form, the weakness is excessive, the throat very dark coloured, with brown sloughs, putrid breath, acrid discharge from the nose, &c. The eruption is either fainter, or more purple than in mild cases, and occasionally appears and disappears. After the fever goes off, the legs sometimes swell, and the child becomes dropsical. Sometimes the ears suppurate, and he is rendered deaf; or very troublesome tumours are formed about the neck.

I do not intend to enter into a consideration of all the practice necessary; but I shall do a most essential service to parents, if I can prevail on them, whenever they discover this disease, and find the skin very warm, at the same time that the child has no sensation of chilness, to put him into an empty tub, and pour over him a pitcher of cold water. They will find, that this will make the skin cooler, bring down the frequency of the pulse, and

whereas, he was before this, languid and dull, he is now all alive, and feels refreshed. One application however, is seldom sufficient; in a short time, he again becomes very warm and restless, and requires in a few hours, to have the cold water poured on him. It may be employed twice a day, for two days, after that, it is of less benefit. It sometimes checks the disease at once, and in almost every instance, renders it mild, if it do not stop it. From much experience, I can say, it never does harm.

Another very beneficial practice is, giving such doses of calomel, senna, or other physic, as will purge pretty freely, but not violently. This brings off fetid stools, and so far from producing weakness, gives great relief, and prevents the troublesome consequences, which sometimes follow scarlet fever. When there is much oppression, a gentle ipecacuanha vomit may be given before the first dose of physic. The diet should consist of beef-tea, stewed apples, panado, &c. Ripe fruit, is always proper, and will act as a gargle for the throat. If the child be old enough to use a gargle, infusion of roses, acidulated with nitric acid, or infusion of cayenne pepper, so strong, as to be pretty pungent, may be employed. Sometimes dropsical swellings succeed scarlet fever, especially if laxatives have

been neglected, or the ears inflame and discharge matter. The treatment of these, and many other circumstances, such as the use of wine, bark, capsicum, and different remedies in particular situations, cannot be usefully discussed in a popular work.

SECTION XVI.

MEASLES begin with a distinct eruptive fever, the patient complaining of chillness, succeeded by heat, frequent pulse, loss of appetite, debility, pain about the back and limbs, white tongue, thirst, dry cough, sneezing, headach, and watery-eye. This fever sometimes attacks suddenly, when in perfect health ; in other instances, the children are fretful, and have a hoarse cough for several days preceding it. The eruption generally appears on the fourth day of the fever. The sickness and nausea then go off, but the fever continues until the sixth day, and is attended with considerable cough, and often with pain in the chest, which indeed frequently comes on before the eruption. There is also sometimes a great degree of drowsiness, amounting even to stupor. The eruption first appears on the face, and then on the body. It consists at first of small spots, like flea-bites,

of a purplish colour, and presently a number of spots, coalescing, form patches. The eruption, however varies, according to the age of the child, but it is generally so well known, that a minute description will be unnecessary. The eruption begins to fade on the third day after its appearance, and in other three days, it has entirely gone away, the skin peeling off like bran. In some instances, however, the eruption disappears early, and these are not formidable.

If on the attack of the disease, the child be much oppressed, and very sick, a gentle ipecacuanha vomit will be proper, and the bowels should afterwards be opened, by a mild dose of calomel, or infusion of senna. During the eruptive fever, the child should neither be exposed to cold, nor kept unusually warm, and in general, he requires no medicine, except gentle laxatives, and plenty of whey, tamarind beveridge, toast water, &c. The diet should be light, such as weak beef-tea, stewed apples, &c.; ripe fruit will be proper. When the eruption is coming out, the tepid bath at night is useful. In every case, there is cough; but if there be also much pain in the breast, or oppression in breathing, the application of a blister to the breast, will be indispensable, and gentle purges should be administered. In most instances, the pecto-

ral complaints proceed from the state of the membrane lining the ramification of the wind-pipe. This is a continuation of that which lines the nostrils and throat, and these parts are at the same time affected, inducing uneasiness about the forehead and hoarseness. The frequent inhaling of the steam of warm water is useful. In some instances, but these are rare, it may be necessary, on account of inflammation of the lungs, which can only be distinguished by a skilful practitioner, to apply one or more leeches on the breast; but in general, a repetition of small blisters gives relief without bleeding.

If the cough should continue after the eruption has gone off, or if it should return, and especially, if it be attended with any difficulty of breathing, or pain, a blister should be immediately applied to the breast. A dry teasing cough, without oppressed breathing, yields to the use of laudanum, and strengthening medicines, such as infusion of bark.

The principal danger, arising from the state of the breast, I have directed the attention chiefly to it, but in some instances, the head seems to suffer, the child lying in a state of great drowsiness, approaching to stupor, for some days. Slight drowsiness is common, but this is excessive. The most useful

practice, is to keep the bowels open, and shave the head, afterwards applying, either a sinapism or blister, according to the urgency of the case. Many no doubt, would get well without this, but some from neglecting it, may be lost. It is most frequent in those cases, where the eruption has receded. In such circumstances, the warm bath, having a little mustard mixed with it, is useful. If the pulse be weak, and very quick, white-wine-whey is a necessary cordial; and if there be much purging, an opiate injection should be given.

It is too much the case, to give spirits and other stimulants indiscriminately, in order to make the measles strike out. There may be cases where cordials are proper, but in general, during the disease, they do much harm, aggravating the pectoral complaint, which is the chief source of danger.

After the disease has gone off, the diet may be made more nourishing, and if there be no pulmonic disease, a little wine may be allowed, if the weakness be considerable; but I am not inclined to dread the debility succeeding to the measles so very much, as some for whose opinion, in other matters, I have a great respect.

SECTION XVII.

THERE is an eruptive disease, often depending chiefly on a disordered state of the stomach and bowels, known to medical men under the name of roseola. It varies according to circumstances, which it is not necessary to point out here. One variety, very much resembles measles, and another, scarlet fever; but in the first case, there is no sneezing nor cough, nor watery-eye, and seldom any fever; in the second, there is no sore throat, and very little heat of the skin, or fever. In both cases, the eruption generally goes soon off. It is seldom necessary to interfere, at least farther, than to give a gentle laxative; but in some instances, the child is seized with a convulsion or drowsiness, or even delirium. But these symptoms yield in most cases, to the use of a saline clyster, and the tepid bath, followed by a smart dose of calomel. Roseola is usually a very harmless disease.

Another eruption is called the nettle rash, from its resemblance to the effect produced by nettles on the skin. It is sometimes attended with fever, and the eruption, which is hot and itchy, appears and disappears, alternately, very suddenly. A gentle emetic,

followed by one or two doses of physic, is all that is required.

SECTION XVIII.

THE chicken pox, is preceded by feverish symptoms, such as chilness, quick pulse, hot skin, restlessness, diminished appetite, thirst, and headach. In some cases, the fever is severe, and attended with distressing retching, great agitation during the sleep, and even delirium. In others, it is scarcely perceptible. On the third day, the eruption appears, first on the body, and then on the face, and lastly on the extremities; when the eruption appears, the fever declines. The pustules, which are very itchy, early contain a yellow water, or liquor, and by the fifth day are covered with scabs, which leave no pits. There are different varieties of this disease, for in some the pustules are larger than in others, or go off sooner. This is scarcely ever dangerous, and is seldom even troublesome; nor is it generally necessary to confine the patient, or do more than give one or two doses of gentle physic. The fever and uneasy feelings may be greatly mitigated, and the eruption rendered slighter, by washing the surface with cold water in the commencement of the dis-

ease. The itching may be abated afterwards, by sponging the skin occasionally, with cold vinegar and water. In some cases, especially if the bowels be neglected, and the child be allowed to feed grossly, the fever may be strong, and the pustules become much inflamed. Some of them may even end in sloughs, which leave deep marks, worse than those of the small pox, and as in that disease, so also in this, very troublesome boils may harass the patient for a long time. This is chiefly the case in bad constitutions. I have mentioned the causes; and the cure, or mean of prevention, evidently consists in the use of laxatives and light diet.

SECTION XIX.

It is fortunately now unnecessary, in a work of this kind, to describe the small-pox. The discovery of the cow-pock has checked the ravages of that loathsome and dangerous disease. The cow-pock consists of a single vesicle, which appears on the spot where the vaccine matter is inserted. The colour is dull white, but it is red at the edges. It contains a fluid as clear as crystal, about the eighth or ninth day. A redness, or inflammation of the skin spreads to a little distance

from it, or in medical language, it becomes surrounded with a red areola, about the size of half a crown. This begins to fade on the eleventh or twelfth day, and the vesicle becomes brown, and presently is covered with a glossy, hard scab, which discovers, when it falls off, a permanent scar. Now we have here, first to consider where the inoculation should be performed; and secondly, if it be complete in its effect.

In boys, it is of little consequence where the vesicle is seated, and the arm is as good as any part; but in girls it is better to inoculate on the outside of the thigh, a little above the knee. Upon the second point, there has been a difference of opinion. Parents cannot too generally know, that the arm may inflame, and yet the vesicle may not be of the genuine kind. If the progress be different from the usual course, then there is always a doubt, lest it may not give security against the small-pox. If, for example, there be no areola at all, or if on the other hand, it appear early, for instance on the fifth or sixth day, and especially, if the vesicle be not round or oval, but jagged or irregular, and contain on or before the eighth day, a turbid or white, instead of a clear fluid, it will be necessary to re-inoculate. It is possible also, that the vesicle may be of the genuine kind, but the consti-

tution may not be fully affected by it. This cannot be determined by appearances or symptoms, but it may, by a very innocent and slight test. If on the morning of the sixth day, a second inoculation be performed on the other arm or leg, it will advance quickly, and become surrounded with a red areola, nearly as soon as the first vesicle will be. If this trial be neglected, we have still two other methods of determining, if the constitution be properly altered. The first is by inoculating with vaccine matter, any time after the child has recovered completely from the first inoculation; the second is by using small-pox matter. In either case, the scratch only inflames a little, it soon heals, and no other effect is produced. Without one or other of these tests, no child can be pronounced secure, for I have seen small-pox succeed cow-pox, where the vesicle had all the genuine characters, and had run its course regularly. In such cases, the small-pox has been mild, though the pustules have been copious, and contained as much matter as usual. If it be asked, why every parent does not reinoculate as a test, I can only answer, that it is from the same cause which makes many neglect insuring their property, namely, a belief that there is no great chance of its taking fire.

It has been urged as an objection against the cow-pox, that it produced cutaneous diseases afterwards, but this is groundless. Small-pox on the other hand, may be succeeded by most troublesome boils, and may irreparably affect important organs, or the whole constitution.

With regard to the treatment of cow-pox, I have nothing to observe, except, that the part should, when the areola forms, be dusted frequently with flour or chalk; and after the vesicle breaks, the same should be continued, in order to form a crust on the sore, which is much better than dressing it with ointment.

SECTION XX.

THE disease named skin-bound, appears under different forms. It is only necessary to notice that which most frequently is met with in private practice. The child in this species, which comes on slowly, becomes delicate, and has the skin from birth a little more rigid than usual, particularly about the mouth and neck. It gradually becomes hard, somewhat shining, and of a yellow colour, or waxy appearance, and does not move over the parts below it, neither can it be pinched

up between the finger and thumb. The joints become stiff, and the rigidity extends over the surface. The child very early is dull, oppressed, and moans much. The strength gradually sinks, and not unfrequently, he is carried off in a fit. The pulse in this disease is quick, the appetite impaired, the bowels, generally, but not always bound, the extremities are cold, and often different parts have a purple, or erysipelatous appearance, but these are not hot, they are sometimes even colder than the natural standard. In some instances, the skin, in the beginning of the disease, is a little rough, or slightly herpetic. It may begin early after birth, or not for weeks, and the complaint frequently lasts upwards of a month. As this has occasionally attacked different children in the same family, there is reason to suppose, that it depends on a peculiarity of constitution, and in such cases, the tendency to this disease generally diminishes with every child of the same sex; for it is observable, that it is in these instances confined, either to boys or girls. Calomel has done more good than other medicines, but too frequently, every thing fails. It may be prudent to try the effects of mercury on the parents, to prevent future accidents of the same kind.

The other species of this disease are more

rapid in their course, and generally attended with more appearance of erysipelas. They are not however less dangerous.

SECTION XXI.

CHILBLAINS are too well known to require description. They are produced by exposure of the extremities to cold and damp, and, particularly, by suddenly warming them after they have been thus cooled. The mode of preventing them, will therefore be evident. The extremities are to be defended from cold, by warm gloves or stockings, and preventing the child from sitting with them wet; a hasty approach to the fire is also to be avoided.

When they are produced, the best remedy is the frequent application of camphorated spirit of wine, and the further operation of the causes which gave rise to them, must be checked. If they have ulcerated, the best dressing is made, by mixing an ounce of basilicon, with a dram of finely powdered camphor. It is to be spread thin on linen.

SECTION XXII.

SCALDS or burns have been variously treated, some using very cold water, others, strong spirits or vinegar. I do not mean to give instructions for the complete management of extensive burns, but it cannot be too generally known, that the most useful and effectual application, in almost every case, at first, is vinegar, applied by means of cloths frequently renewed; this often prevents blisters from rising. If vinegar cannot be immediately procured, common spirits will form the best substitute till it be had. When blisters arise, they are to be opened with a small orifice, and the vinegar continued. If this gives much pain, from the vinegar acting on raw parts, they may be partially defended, by interposing a thin rag, lightly oiled with olive oil, and the vinegar is to be applied above this. In slight cases, especially on the face or neck, after the vinegar has been continued for several hours, and the pain has abated, the part may be dressed with white lead ointment; or this may be frequently applied with a feather or pencil, and then a little white lead may be sprinkled over this; or if the scald be pretty large, finely powdered

chalk may be used in place of it. This dressing is to be repeated three times a day, or oftener, if the part be very tender. It is to be gently cleaned morning and evening, with milk and water. Pain is to be abated with a suitable dose of laudanum. In more extensive burns, oil of turpentine alone, or mixed with basilicon, has been employed from the first as a dressing; and when the sores became fungous or discharged much, they have been covered with powdered chalk; but no parent in a matter of so much importance will trust to his own judgment.

CHAPTER VI.

Of Aphthæ, and Ulceration of the Mouth.

THE thrush or sore mouth, is a disease peculiarly frequent during the first month. The mouth is hot, and the tongue, and inside of the lips, have white specks on their surfaces, like small bits of curd. These in slight cases are very few, but if neglected, they increase

and spread along the inside of the cheek, and nearly cover the tongue, with a white cake, or crust, or they may even extend to the throat. In the course of three or four days, the aphthæ grow yellowish, shrivel, and fall off, leaving the skin red; but different crops may appear in succession, even on the same place. Along with this state of the mouth, we often find, that the child is dull, and has less inclination to suck, though in some instances, he sucks with unusual greediness, or grasps the nipple firmly. He is subject to gripes and fits of crying, and the stools have a changed appearance.

This disease is apt to affect the nipple, producing excoriation; whilst on the other hand, a sore nipple may produce aphthæ. In general, it proceeds from a disordered state of the stomach and bowels, occasioned by giving too much meat, particularly panado, or by attempts to bring up the child on the spoon, or by the milk disagreeing with him. It may also be produced by exposure to cold, especially in damp seasons, which however, probably, operates primarily on the bowels. It is usual for nurses, to have immediate recourse to borax; but although this may clean the mouth, it does not remove the cause, and if early employed, the spots will quickly re-appear. The best practice is to give a small

dose of rhubarb and magnesia first, which generally corrects the disordered state of the bowels; and for two days, or until the spots begin to change their colour, a tea-spoonful of cold water, or water beat up with a little white of egg, should be put into the mouth frequently; afterwards a solution of borax will be very proper. Stronger stimulants are not in general so useful, and may even be hurtful.

There is a worse species of sore mouth, which is preceded by, or attended with fever, and great oppresion; the bowels are much affected, the belly being tender, or the child much griped, and sometimes he even has fits. When the aphthæ appear, he seems a little relieved, but the relief is not in general permanent. The tongue becomes quite covered with spots, and in some instances, so stiff, or so tender, that the child cannot suck. The stools are green, and sometimes so acrid, that the bottom is scalded. The child also is sick, and occasionally vomits, and lies in a dull drowsy state, starting or screaming at times, and if not soon relieved, sinks under the complaint. It would appear, that the aphthæ may extend towards the stomach, or a little way into the wind-pipe, producing cough and difficult breathing. Frequent vomiting and purging, tenderness of the belly, drowsiness,

moaning and spasm, are very unfavourable symptoms. If the child cannot suck, or the aphthæ become brown, and are long of falling off; or if, after they come off, the parts are parched, and look foul, it is unpleasant; and he is never out of danger till he can suck freely.

In this species of aphthæ, it is proper at the commencement, to give a gentle emetic of ipecacuanha, and afterwards small doses of magnesia, to rectify the state of the bowels, and lessen the irritation there. The great object however, is to keep up the strength of the child, by suitable nourishment. If he cannot suck, the breast-milk, or beef-tea, must be given frequently with a spoon, and a little white-wine-whey, must also be given as a cordial, with a frequency, proportioned to the age and debility of the child. Injections of milk, or beef-tea, are also proper. Some employ bark, but it must, if it be used at all, be given in a clyster; and in this way, nearly a tea-spoonful may be thrown in at once, mixed with as little starch as is sufficient to make it pass easily through the pipe; four drops of laudanum may be added to it, if it cannot be retained. It must be repeated, at least three times in the twelve hours.

A little jelly water, or port-wine and water, or a dram of sweet spirit of nitre and four

ounces of water, may be put into the mouth frequently, as a wash or a gargle.

The child must be kept very clean, and be daily washed.

There is a third species of aphthæ, very different from the former, in which the roof of the mouth, and tongue, and gums are white, and have a scalded appearance; whilst in some places, or about the lips, we may discover ulcerated spots. This is sometimes accompanied with hoarseness, and bloatches on the skin, or about the bottom. It is only to be cured by a course of mercurial medicines.

About the time of teething, the tongue, lips and gums, are sometimes spotted over, with excoriations, seldom larger than a coriander seed, and covered with a brownish mucus. They are tender, and generally accompanied with salivation. They heal soon, and require only a gentle laxative, and to be touched with a little tincture of myrrh.

More formidable diseases may affect the mouth and cheek, producing a foul eating ulcer, with most offensive discharge. Whenever any part of the gums or lips becomes tumid, hard and livid, no time is to be lost in calling assistance; for if neglected, the tumour increases, the part ulcerates, and the surface of the sore has a ragged appearance, and is covered with brown mat-

ter, mixed occasionally with small clots of blood. A spreading, obstinate sore on the cheek or lip, begins with a hard, firm, shining swelling, which presently becomes livid on the top, and if the parts can be saved, it is by early attention.

CHAPTER VII.

Of Sickness and Vomiting.

INFANTS sometimes, are very suddenly seized with a sickness, and inclination to vomit, which they resist as long as possible. This adds greatly to their distress, and prolongs it. The breath is sour, or ill-smelled, the eye inanimate, the lips slightly livid, the countenance ghastly, and the child loathes the breast. These appearances are highly alarming to an observer, and if the child have been previously complaining, will indeed indicate great danger. But when they come on suddenly, especially if the stomach have been loaded, or some improper food given, the

death-like aspect presently passes off. The child is speedily relieved, first by vomiting, and afterwards by sleeping. If there be no appearance, of spontaneous vomiting taking place, four or five grains of ipecacuanha should be given.

Sickness with oppression about the breast or stomach, occurring in grown-up children, can generally be accounted for, either by their having ate something, which has disagreed with them, or by their having romped too much. In the first case, it is removed by an emetic, in the second by a sleep.

Vomiting is a frequent occurrence with infants, and is not to be considered as morbid, unless it be attended with sickness, ill-smelled breath, and discharge of cheesy or sour stuff. Thriving children puke often after sucking, but then they generally throw up only a mouthful at a time, without straining, or being ill. This requires no medicine. But vomiting, accompanied with sickness or paleness, and dull appearance, demands attention. It either proceeds from disorder of the stomach, and in that case, is relieved by a gentle emetic, and if necessary, rubbing the pit of the stomach with a little laudanum; or it is a symptom of some serious indisposition, or affection of the head, which

must be determined by the presence, or concomitant appearance, of other symptoms, such as fever, screaming, drowsiness, spasms, &c. Vomiting depending on teething is distinguished by the state of the mouth.

When grown-up children are seized suddenly with sickness or inclination to vomit, or are listless or chilly, and have a white tongue, and are careless about food, no time should be lost in giving an emetic, and afterwards a purgative, by which a troublesome fever may be prevented..

CHAPTER VIII.

Of Cholic.

SOME children are very subject to cholic, which is easily discovered by sudden fits of crying or screaming, which nothing can appease, the child bends back the body, spurs with the feet, and then has an abatement of the pain for a few minutes, obtained sometimes by the discharge of wind. An attack

may consist of one uninterrupted fit, or of repeated screaming, with intervening moments of ease. Cholic may occur only occasionally, or it may return almost every night. It may be induced by costiveness, by cold, by damp cloathes, by the liberal use of panado, particularly if the bread have been a little sour, by passion, or some state of the nurse, affecting the milk, by collection of wind in the bowels; or it may accompany thin and slimy purging, which is sometimes produced by the injudicious use of laxatives.

In ordinary cases, nurses give gin and water, which is a most injurious practice, and may in some instances kill the child. Laudanum gives speedy relief, but it weakens the stomach and nervous system, and produces costiveness. A few drops of tincture of asafoetida, mixed with oil of anise, is generally effectual, and is always safe*. The warm bath is useful, and if these means do not give relief, rubbing the belly with laudanum will be safer than giving it internally. Tincture of henbane is also useful, in the dose of four

* Two drams of tincture of asafoetida, twenty drops of oil of anise, and an ounce of mucilage of gum arabic, may be rubbed up together, and of this mixture, from ten to twenty drops, in a little water will be a proper dose.

drops to an infant, and ten or twelve to a child a year old. A clyster of gruel, salt, and a little oil, is in most cases proper; and if the child have been costive, it will be right to give a tea-spoonful of castor oil, after these remedies have procured relief, in order to prevent a return.

When children are subject to cholic, we may suspect that there is something wrong in the diet. Common panado, especially if it contain much sugar, is very apt to have this effect. The nurse's milk, may also be flatulent, and this bad property is sometimes increased by the use of porter or ale, intended to increase the quantity. The state of the child's bowels must be attended to, and he should not be allowed to load the stomach by taking too much at a time. If he discharge wind upwards after sucking, he should be gently dandled, as motion makes it be expelled. I am no advocate for giving much medicine to children, but when these means do not succeed, it may be necessary to give occasionally a few drops of the mixture, mentioned in the note.

In the more violent and dangerous kind of cholic, the belly is tumid and painful to the touch, to a greater degree than in the former species; the child is hot, the pulse quick, the face flushed, the pain and screaming violent,

and sometimes there is a great pressing, and nothing is passed but bloody slime. As this may proceed from inflammation, or obstruction of the bowels, it evidently is too serious to be committed to unprofessional management. I may only observe, that if the child be constive, or have not lately had a looseness, means should be taken, if the practitioner be at a distance, to procure a stool by a clyster, and the use of castor oil or calomel, at the same time that the child is put into the warm bath, and rubbed with laudanum. If the bowels be open, a clyster containing laudanum, can seldom be improper, if medical aid cannot be early obtained.

CHAPTER IX.

Of Purging.

PURGING, is a disease of the utmost importance, and ought to be early attended to. It annually carries off a great many children, some of them suddenly, but most of them after a lingering illness. Purging may be excited, either by some cause, acting immediately on the bowels, or by some distant irritation, as for example, the state of the jaw during teething, or of the brain, in water of the head. When it occurs in young children, it is generally from the first of these causes. Healthy well-fed children, have seldom a purging; it appears either in those who are very delicate, and whose stomach may be incapable of digesting properly, or in those who, though healthy, have had improper food, or bad milk. It may also, in either of these circumstances, be caused by too much bile.

I have formerly mentioned the natural appearance of stools, but they, in cases of purging, are often greatly altered in smell, colour, and consistence. If young infants, who have been sparingly nursed, and fed chiefly by the spoon, do not become costive, they often have on the other hand, a purging of ill smelled, dark, watery fluid, mixed with pieces of curd, and accompanied with some pain. This requires the use of a little rhubarb and magnesia, twice a day, or seldomer, if the stools become better in appearance. But the great remedy is a good nurse, which strikes at the root of the disease.

Children are sometimes suddenly seized with a purging of green, sour-smelled stools, accompanied with crying and peevishness. This proceeds generally from some fault in the digestive organs, or from improper diet. A pretty smart dose of rhubarb and magnesia will be proper to clear the bowels, and restore their proper action; afterwards, four grains of prepared chalk, with half a grain of calomel, may be given morning and evening, for a few days, or until the stools become more natural. The child should be confined to the breast alone, or if any food be allowed, it ought to consist of well boiled arrow-root.

If considerable irritation exist in the bowels,

or if the child have been seized with a bowel complaint, in consequence of exposure to cold, the stools are generally slimy, and sometimes even tinged with blood. If this state do not soon go off, and especially, if it be attended with great pain, or heat of the skin, we may suspect some very serious internal disease, which may either prove rapidly fatal, or the child may sink more slowly, becoming prodigiously emaciated, like a skeleton covered with skin. He purges dark coloured, or slimy, frothy matter, or substance like rotten egg, which is sometimes squirted away, with great force and noise. If this disease be long neglected, perhaps nothing can save the child; it is therefore of consequence to attack it early. It is also necessary to recollect, that a purging, at first milder, and less alarming in appearance than this, may nevertheless by neglect, end in the same way. This kind of looseness may occur at any period, but is peculiarly frequent shortly after being weaned, which is owing to the sudden change of diet, and to weakness from deficiency of properly digested nourishment. It is in general, a good practice, particularly if the child be sick, to give in the beginning, a gentle emetic of ipecacuanha, and afterwards small doses of calomel, half a grain, or a grain, for instance, according to the age, morning

and evening, to alter the state of the bowels. An injection of starch and laudanum, ought to be given, either once or twice a day, according to the severity of the disease. This allays the irritation, and checks the weakening effect of continued purging. It is by no means incompatible with the use of calomel, or gentle laxatives. The child is to be supported by beef-tea, and arrow root, or the breast-milk.

I fear, that entering more particularly into the history and treatment of the different varieties of this disease, would only tend to bewilder the reader. The following general remarks, however, will I trust, be useful.

First: In all cases of purging, accompanied with sickness or oppression, or apparently connected with disorder of the stomach, it will be prudent in the beginning of the disease, to give a gentle emetic of ipecacuanha.

Second: When purging is attended with quick pulse, and hot skin, the tepid bath morning and evening will be useful.

Third: When the stools are changed in their appearance, being green and watery, and the disease has not continued long, a dose of rhubarb and magnesia will be proper; or if the stools be foetid, frothy, or dark coloured, small doses of calomel, as directed above, will be useful.

Fourth: After the operation of the laxa-

tive, it will generally be beneficial, and in many cases of serious disease, essentially necessary, to give a clyster containing laudanum. This is to be repeated oftener or seldomer, according to the violence of the disease. It is to be retained for some minutes, by pressing on the fundament with a cloth, and after this, it is likely to be kept for an hour or two.

Fifth : The use of laudanum by the mouth, is generally hurtful, or at best, greatly inferior in its benefits to the clyster. It weakens the stomach and the whole system, and impairs the appetite. The external application of this medicine, is in almost every case, safe and useful. The belly may be rubbed with laudanum, or covered with a plaster, containing camphor and opium.

Sixth : Astringents have in general, no good effect, and may do harm. Medicines employed with this intention, when they do good, will be found to possess some additional property. A mixture of toasted rhubarb, with crabs eyes, water, and a little cinnamon water, and sometimes with a few drops of laudanum, has been employed, and in slight cases with advantage, but this it is evident, is not simply an astringent.

Seventh : Where purging seems connected with teething, the gums ought to be cut, and

any affection of other organs, must be promptly removed by suitable remedies.

Eighth: If the child be not weaned, and the disease be obstinate, it will be proper to try the effect of changing the nurse, if altering her diet do no good. Or if looseness come on soon after weaning, some children might be saved by being again suckled, if they will take the breast. In other cases, and even when the child is receiving suck, it may be proper to give arrow-root, beef-tea, or biscuit-meat, boiled with milk. The strength is also to be supported by white-wine-whey. Clysters of beef-tea, or arrow-root, are of signal service. They ought in every instance of violent, or protracted bowel complaint, and indeed, in all diseases of children, when the appetite is gone, to be employed two or three times a day. The quantity may be a small tea-cupful, and if it cannot otherwise be retained, five or six drops of laudanum may be added. Some children by this practice have been evidently snatched from the grave, their strength being thus preserved, until they were able to take nourishment by the mouth.

CHAPTER X.

Of Costiveness.

COSTIVENESS is natural to some children, acquired by others. In the former case, it often happens, that the mother is of the same habit. Grown up children, in consequence of this state of the bowels, are subject to fevers, St. Vitus's Dance, &c. and we cannot suppose, that when they are younger, they will suffer less. When infants are naturally costive, having only one stool in twenty-four hours, or in thirty-six hours, and at the same time make water freely, and are vigorous, lively, and healthy in their looks, there is no ground for uneasiness. But, if the child, after having been for some weeks open, like others, become costive, and especially if he continue small, and do not thrive, or if from the first he have been costive, and is subject to fits of crying, is pale and delicate, there is no doubt of the propriety of interfering. Indeed, it should be remembered, that less risk will

arise from using means, perhaps in some cases without absolute necessity, than by uniformly resorting to them, only in the most urgent circumstances. It is better to interfere too soon than too late.

Calomel is generally a safe and useful laxative, and may be given at first every day, for three or four days, in such a dose, as to make the bowels rather open; half a grain, a grain, or even more, according to the effects, may be employed. This practice often prevents the continuation of costiveness, or if it do not, some other laxative is to be given daily, or once in the two days, so as to procure an easy stool. We may employ castor oil, calcined magnesia, or manna, and occasionally in place of these, a suppository made of soap. When oppression, or other bad effects have already resulted from neglected costiveness, a smart purge must be employed, such as infusion of senna, or some preparation of aloes.

A continued tendency to costiveness, will require the use of laxative diet, such as barley meal porridge, with butter milk, ale-berry, sweetened with melasses, &c. or if the child be not weaned, it may be necessary to change the milk.

CHAPTER XI.

Of Convulsions.

CONVULSIONS take place at any age, and may occur either in the course of some other disease, under which the child has been labouring for some time, or suddenly, in a state of previous health. In the one case, they are highly dangerous, and often indicate a fatal issue ; in the other, they are frequently attended with little hazard. Convulsions or draughts, as they are called, vary in degree, from a slight movement of the muscles of the face, to a rigid or convulsed state, of almost the whole body. In general, whatever be the degree of the movement, the countenance is altered, both in colour and expression, and the patient is insensible, and cannot follow an object with the eye. In some instances, the motion is so slight, that the child may rather be said to be in a state of fainting, or stupor, than of convulsion. In very young

infants, there is sometimes only a smile about the mouth, the eye, which is half closed, turns slowly round, the breathing seems occasionally to flutter, and the child starts, and throws out the arms on the least noise. These motions, called inward fits, frequently proceed from wind in the bowels.

Convulsions vary in point of duration, as well as of violence. They sometimes go off in a few seconds ; in other instances, they continue for several minutes. The child may have only one short attack, and become well immediately afterwards, or he may remain in a languid sleepy state; or he may have repeated attacks in a very short time, and continue insensible during the whole of the intervening period. Convulsions may be produced by wind, or irritation in the bowels, dependant on worms, costiveness, indigestible food, acrid stools, &c. ; or by teething ; or by breathing bad or confined air ; or by the striking in of some eruption ; or during the coming out of others, such as small-pox ; or by affections of the brain itself ; or by other spasmodic diseases, such as hooping cough, &c. I shall not enter, however, into any minute consideration of the causes of convulsions, or professionally into the principles on which the different points of practice depend. It will be more useful to observe,

First : That when the child has been ill for some time before convulsions come on, especially if the pulse have been quick, the skin warm, and the head affected, whilst these symptoms could not be traced to the effect of dentition, there is ground to believe, that the convulsions proceed from a diseased state of the brain, most probably from water in the head. It is to be hoped, that every attentive parent will, from the previous symptoms, have been led, to procure for her child professional advice, before this period of the disease.

Second : In the case of very young infants, if there have been no preceding disease, there is great reason to attribute the convulsion to the state of the bowels; and we shall be confirmed in our opinion, by finding that the stools are not of a good appearance; that there is much wind in the bowels; that the child has not been nursed or fed properly; that the nurse has been agitated by passion, or committed some irregularity in diet; or lastly, in infants a few days old, that the meconium is not expelled.

Third : When young infants have convulsions from the state of the bowels, we generally find, that the face is pale, and the motions slight; but if they proceed from the state of the brain, which is still more alarming, the

motions are stronger, and more deserving of the name of convulsion.

Fourth : At this early period, children from an irritated state of the navel, when the cord drops off, and also from affections of the nervous system, may have locked jaw, and the spine stiffly bent back, by a convulsion.

Fifth : After the child is two months old, irritation of the bowels, proceeding from bad stools, worms, or indigestible food, does not produce those gentle motions, or that apparently languid state, observable at an earlier period, but generally excites pretty strong and well marked convulsions ; and therefore, after this time, the distinction mentioned in the third observation will not hold good.

Sixth : At the period when children are teething, convulsions may be produced by irritation of the gums, more likely than by other causes; and therefore, we should in every case which occurs at that time, examine carefully the state of the gums.

When a child is seized with convulsions, a great consternation immediately prevails, and without some determinate rules, either nothing will be done, or very contradictory plans may be adopted.

The first general rule in such cases, is to order the tepid bath, which is proper in every instance. When the motion is strong, it al-

lays it ; when it is slight, it brings on a state of quiet repose. The water should be agreeably warm to the hand, and the child should be kept in it, up to the neck for some minutes, if he do not get relief sooner. If he be very pale or languid, the addition of a table-spoonful of mustard or hartshorn to the bath is useful.

Second : Whilst the child is in the bath, a common injection is to be prepared, and administered immediately after he comes out ; and afterwards a dose of calomel proportioned to his age, is to be given.

Third : If the child seem to be sick, or oppressed in the breathing, or about the stomach, or have been known to have had something which has disordered the stomach, vomiting should be excited, by tickling the throat with a feather, during the fit, or giving ipecacuanha, as soon as the child can swallow.

Fourth : After the child is taken out of the bath, it will be useful to rub him, particularly over the spine and the stomach, with oil of amber, or with spirits, having about a sixth part of hartshorn added. If any rash have struck in, rubbing the surface with camphorated oil of turpentine, or applying a small warm plaster over the stomach, will be useful.

Fifth : If the gums be swelled, or there be

any appearance of teething, the part should be instantly scarified.

Sixth : If these means do not speedily restore the child, or if there should be a repetition of the fit, or the child do not completely recover, then we must take measures for preventing the recurrence, or restoring health. If the face be flushed, or the head be large, or the child remain insensible or stupid, one or more leeches, according to the age, must be applied to the temples. The head ought also to be shaved, and covered with a blister. At the same time, it will be proper, to give such doses of calomel, as keep the bowels very open. This is more especially necessary, if the stools be foetid, or of an unnatural appearance. If the child remain languid or insensible, it will be of benefit to rub the surface frequently with oil of amber, strong spirits, or camphorated oil of turpentine. When there appears to be much irritation, rubbing the back-bone with laudanum is proper, but no opium should in general be given internally.

When there is a tendency to frequent returns, it will be proper, besides keeping the bowels correct by means of calomel, or rhubarb and magnesia, to give repeatedly a few drops of tincture of asafoetida, mixed with oil of anise. In all cases, the strength is to

be supported by suitable nourishment, or even by clysters of beef-tea.

Seventh : The directions I have given, are particularly applicable to the convulsions of children above a week or two old. I may add, that although the same remarks may often apply to those who are younger, yet in general, the convulsions or inward fits of infants a day or two old, require chiefly gentle laxatives, such as magnesia and rhubarb, or calomel, and sedulous attention to nourishment, with gentle friction over the surface, especially of the belly, with camphorated spirit of wine.

Eighth : When fits are apprehended in dentition, from starting, feverishness, and other circumstances, ascertained by former experience, to have preceded convulsions, the gum should be cut, and a gentle emetic exhibited. Laxatives and the warm bath are also useful, and these means generally prevent the fit.

CHAPTER XII.

Of Chorea.

THE disease called chorea, or St. Vitus's dance, occurs most frequently, from the age of eight years to the period of puberty. It approaches with languor, and indifference with regard to the usual amusements, a variable, and sometimes a keen appetite, continued costiveness, occasionally combined with a flabby, lank state of the belly, but much oftener, with a hardness and swelling, particularly at the lower part. The stools are not of natural appearance. Presently, convulsive affections of the face take place, and are succeeded with twitches and starting of the extremities. The patient often cannot walk easily, in consequence of one leg twisting in before the other. He is perpetually changing his position, and fidgetting when sitting. He cannot put out his tongue steadily, nor speak briskly, nor cut his meat correctly, far

less can he write or paint. He is in constant motion, and even when asleep he is restless. In some instances, an arm or a leg becomes palsied, or shakes violently, and I have seen the head move with as much velocity as a rattle. The eye is dull, the countenance becomes vacant, and the patient may at last become idiotical. The pulse at first is regular, though often feeble, but at last fever may take place, and in every case, the patient becomes emaciated.

This disease generally proceeds from, or is connected with, a costive state of the bowels; a state which gives rise also to many other complaints, and some of them of a dangerous nature. It surely then will not be difficult, to impress upon the mind of parents, the necessity of paying great attention to the bowels. I do not mean to recommend the foolish practice, which at one time was in vogue, of giving physic indiscriminately, at stated periods; but I believe, that much good may result from the occasional use of purges, as well as from daily attention to suitable evacuation. In the disease in question, nothing gives so essential relief, as regular and continued purging. When the patient is old enough to swallow aloetic pills, two, or sometimes more, of these may be taken, twice or three times a day; or where

these cannot be used, infusion of senna, epsom salts, or other purgatives, must be employed; and it will be found, that usually, though not always, the stools are foetid, or unnatural in their appearance. This, so far from weakening the patient, has a contrary effect; for although he may, perhaps, have five or six stools in a day, the pulse becomes stronger, the countenance brighter, the step firmer, and the gesticulations or twitches abate, and at last, after a period, varying from a fortnight to several weeks, or some months, the cure is completed. The cold bath and tonics, may sometimes be useful; but the great remedy is the steady exhibition of purgatives, which have now been introduced into general practice, by Dr. Hamilton, senr.

It is not necessary to give minute directions for conducting the course of purging, as this must always be carried on, under professional inspection. But I may add, that parents ought most scrupulously to administer the doses prescribed, and need not be apprehensive of repeated daily stools being injurious, unless there evidently be a great diminution of strength, and aggravation of all the bad symptoms. Such a case, I have never seen; nor can it occur, I think, in the hands of any judicious practitioner.

CHAPTER XIII.

Of Croup.

THE croup is a disease, which does not usually affect infants under six months old ; but from that age, till the period of puberty, they are liable to it, more especially, however, about the time of being weaned. It is not an infectious disease, but is brought on by damp and cold. It is of two kinds, the inflammatory, and spasmodic ; though there is, perhaps no case, in which spasm does not exist. These have also been called true and spurious croup.

The inflammatory species, that which is most formidable, sometimes comes on pretty quickly, but generally is preceded for a day, or longer, by a hoarse cough, as if the infant had a cold ; and sometimes the throat is sore, or red. Very soon, and usually in the evening, a difficulty of breathing comes on, or the breathing is performed with a considerable

sound, and the cough becomes more frequent, shrill, or barking. A quantity of thick phlegm also comes into the mouth with it, but is not put out. Occasionally, these symptoms are accompanied with a tendency to vomit, and from the first, the pulse is frequent, and the skin hot. The face also becomes flushed, and tumid, and the eyes red, and watery. During the intervals between the fits of coughing, the child sleeps, but not soundly; he breathes with difficulty, is restless, tosses, and is frequently roused with the cough, which is succeeded by, or accompanied with, fits of suffocation, and great agitation; the child, if old enough, starting up, and springing to the bed-post, or clinging to his miserable parent, in the vain hope of obtaining relief. The thirst is considerable, food can be swallowed pretty easily, and although the child is very fretful, he does not cry like one in pain. The face presently becomes much changed, the cheeks perhaps blue, and the lips livid, the extremities cold, and the pulse very feeble, and intermitting. Death sometimes terminates the sufferings, within twenty-four hours; in other cases, not for several days. If recovery take place, the symptoms gradually abate, and the child falls into a quiet sleep; but is for many days in danger of a relapse, if exposed to cold. In this species, a thick

lymphatic crust is found to line the upper part of the wind-pipe, and this at last mechanically obstructs the breathing.

The second species, or spasmodic croup, may take place, not only during infancy, but is even far from being an uncommon complaint, of grown-up girls and women. It in general makes its attack suddenly, though sometimes it is preceded for one or two hours, by a hard cough. The breathing very speedily becomes difficult, and there is a crowing hoarse cough, but scarcely any phlegm comes into the mouth. The hands and feet, from the first are cold, and the pulse is generally quick. The fits of coughing and suffocation, are sometimes pretty severe, but there is no more restlessness in the intervals than can be accounted for, by the state of the wind-pipe. This species then is distinguished, chiefly by the suddenness of its attack, and it, if properly treated, seldom lasts above a few hours; but, if neglected, it may end in true croup. The disease, which attacks grown up girls, is almost always of this species; and I have known it come on every night, for weeks together.

When a child has a hoarse cough, the best practice, is to give an emetic, succeeded by a purgative dose of calomel, and to apply a piece

of flannel round the throat. This generally prevents farther mischief.

But if these precautions have been neglected, or the inflammatory or true croup taken place, then the most vigorous means must be employed, such as emetics, blisters, bloodletting, and calomel. None of these can be trusted to exclusively, though instances may be produced, where any of them has been successful. The best and safest practice, is at once to begin with a brisk emetic, and immediately after this, to put the child in the warm bath for some minutes. When he is taken out, he is to be laid in bed, and calomel employed immediately, in large and repeated doses. If the child, be from six to twelve months old, a grain and a half, or two grains, mixed with sugar, may be given every hour, and the dose is to be increased according to the age, giving four grains to a child of five years old, for instance. This is to be persisted in, till it produce copious purging, which is generally of a green coloured matter; and when this takes place, the symptoms are usually mitigated, and then the dose is decreased, both in quantity and frequency. In some cases, it has been necessary in a short time, to give above one hundred grains.

Dr. James Hamilton, who has paid great attention to the diseases of children, recom-

mends most strongly this practice, in preference to all other remedies. Sorry I am to be obliged, in some measure to dissent from his opinion; for I have, in more cases than one, pushed the calomel very far, and produced the desired purging without any benefit. I therefore must, in the first place, recommend other means to be used, as well as the calomel; and give a caution against continuing the use of that medicine in large doses, after free purging has been excited, and the patient has not been relieved; pushing it farther, would only sink the strength faster. Calomel is always most useful, when it produces vomiting as well as purging. Of the propriety of using emetics, I have already spoken, and I speak consistently with the knowledge of every one, when I say, that they sometimes give great and speedy relief in the outset of the disease, and in a few cases, at an advanced period, they seem to have snatched the patient, as it were from death, by expelling that lymphatic crust, which lines the wind-pipe in croup.

Blood-letting has been extolled by some, and decried by others. If the child be robust, blood may be taken at the commencement of the disease with advantage, but if the disease have made progress, and continued for some hours, I have not known it do any

good ; it is even hurtful, by weakening the patient. If it do not give speedy relief, it ought not, even at the beginning of the disease, to be repeated. It is always desirable to take the blood from a vein, rather than by leeches. The first method, I have known of great service; the second I have seldom seen do the least good. A small blister applied at the upper part of the throat may be beneficial, and I have never seen it do any injury.

The strength ought to be supported by beef-tea, or the breast, if the child be not weaned, and can suck ; and after the violence of the symptoms has abated, mild nourishment must be given frequently, and the child kept from cold, lest a relapse take place.

In the second, or spasmodic croup of infants, the same remedies, particularly emetics and calomel, are to be employed ; and they give relief more easily, and speedily, than in the other species. But if the emetic do not decidedly mitigate the attack, and give considerable ease, blood-letting ought not to be delayed, in place of trusting merely to the calomel. It gives, I think, more certain and speedy relief, than in the other species. When grown up girls are attacked with this, it is often absolutely necessary. With them, the attack is sometimes so sudden and severe,

that the operation of an emetic, or of calomel, cannot always be waited for, and fortunately, the lancet gives instantaneous relief; for after a certain quantity of blood has flowed, the breathing becomes free, and the complaint goes completely off. The sulphate of zinc operates speedily as an emetic, and sometimes removes the spasm, but in many cases it fails, or gives relief only for a few minutes, and we are obliged to resort to the lancet. The chief objection to blood-letting is, that as the disease in grown-up patients may return frequently, this remedy must impair the health; but this consideration has little weight with a patient suffering all the horror of suffocation, and who knows of a mean of instant relief. The recurrence is to be prevented principally by brisk laxatives, such as aloetic pills, castor oil, senna, &c.

Antispasmodics, such as asafœtida, have been employed, both with children and grown-up girls, sometimes with a good effect, but not unless conjoined with purges; and I do not think, they have any effect during the fit. Opium ought not to be given to infants, and in very few instances, have I known it of use to elder patients. Exposure to cold, and damp, and all mental agitation, must be avoided, and scarcely any supper should be allowed.

During dentition, infants are subject to a spasm about the wind-pipe, which is very sudden in its attack, and is attended with a temporary feeling of suffocation, and a consequent crowing inspiration; but there is no hoarse nor croupy cough, and in other respects the child is quite well. It is apt to come on from crying, or from awakening suddenly, or from any cause which hurries, or at all affects the respiration. It may be combined with convulsions. The gums ought to be early cut, the bowels kept open, and if the attacks are frequent, a combination of tincture of hyocianus, and of asafoetida, will be useful; and the throat should be rubbed at night, with a little laudanum, or camphorated spirit of wine, or anodyne balsam. The warm bath is serviceable.

Many children are subject, especially if they get wet feet, to a croupy cough, without any feeling of suffocation. An emetic relieves this, or if the throat be also inflamed, a brisk laxative should be afterwards given; and if any degree of wheezing continues after the emetic, a small blister should be applied to the upper part of the throat.

CHAPTER XIV.

Of Catarrh.

INFANTS, like grown up people, are subject to colds or catarrh, and the symptoms vary, according to circumstances. In some instances, the affection is confined altogether to the membrane of the nostrils, producing an obstruction in breathing, or sniffing sound. This is attended with a discharge, which sometimes excoriates the nostril and lip. It is also occasionally accompanied with fever, and a disordered state of the bowels. The only remedy that is in general required, is a gentle laxative, at the same time that the nostrils are anointed with olive oil by means of a pencil. In some bad cases, the fever runs high, and the inside of the nose is excoriated, and the bones may even become diseased. The treatment consists in supporting the strength, and making suitable local ap-

plication, which can only be pointed out by a practitioner on the spot.

Infants a few days after birth, have sometimes pectoral affections. They are restless, the skin hot, they breathe with some degree of oppression, and very soon with a slight rattling, owing to phlegm in the windpipe. The cough is pretty frequent, but not hard, and often it is accompanied with a purple state of the face and neck. The child generally sneezes. Vomiting not unfrequently attends the cough, or a quantity of viscid phlegm, or in some cases, of mucous, very like purulent matter, comes into the mouth. A gentle emetic, for instance, four grains of ipecacuanha, is useful at first, and afterwards we give morning and evening, for some days, from half a grain, to a grain of calomel, and a quarter of a grain of ipecacuanha. This usually brings away dark green stools. The warm bath is useful. In some cases it may be necessary to apply a small blister to the breast, or rub with camphorated spirits. The strength is to be supported. If this disease be not arrested in the commencement, it is very apt to become obstinate, terminating in a state known to practitioners under the name of chronic bronchitis. This consists in a universally diseased condition of the ramifications of the wind-pipe, which become lined with

puriform matter, and sometimes tubercles are formed in the lungs themselves. The complaint is attended with great weakness and emaciation, and too often terminates in consumption. If the early use of the means already pointed out, do not relieve the symptoms, the child, if the weather permit, must be removed to the country.

Children a little older, have catarrh, attended with very frequent pulse, hot skin, slight redness of the cheeks, watery eye, sneezing, cough, and shortness of breathing. The bowels should be opened with a calomel purge. The warm-bath is to be used, morning and evening, whilst we determine to the surface, and at the same time allay the cough, by means of antimonials, combined with a considerable proportion of tincture of hyocianus. The chest is to be rubbed with anodyne balsam, or if the symptoms be severe, a small blister may be necessary. If the face be early flushed, the pulse extremely quick, the skin very hot, the cough frequent, short, and in a manner restrained, and productive of much uneasiness, if the child cough more, and is more uneasy when laid down, or placed on one side, than on the other, there is reason to apprehend inflammation of the lungs. This however, is not so frequent as with adults. It requires the use of brisk purga-

tives, the early application of leeches to the breast bone, the use of blisters, and the tepid bath. If the disease do not terminate soon, it ends either in abscess, or water in the chest. I have sometimes found after death, several ounces of water. When this is apprehended, the digitalis is the best remedy, and the strength in every instance, is to be carefully supported. The diseases of children differ in this respect from those of adults, that there is scarcely any case where abstinence is proper, or not hurtful. Mild nourishment, such as milk, or beef-tea, is always necessary to infants. Cordials, such as white-wine-whey, are proper in almost every protracted disease. They are only injurious in inflammatory affections, during the acute stage of the disease, but they must not afterwards be given in too great quantity. With children beyond the age infancy, however, more frequent exceptions occur to this general rule, until we arrive at length at a period, when abstinence may be proper, and cordials ambiguous, or hurtful, during many of the first days of disease. This applies to several febrile diseases of childhood or boyhood.

CHAPTER XV.*Of Hooping-Cough.*

THE hooping-cough commences usually very much like common cold, but the cough is more obstinate and severe, and in some instances is attended with considerable frequency of pulse, and even with oppresion, languor, sickness, and loathing of food. Presently, the cough assumes the characteristic marks of the disease, the fits come on instantaneously, or without much warning, the cough is prolonged for sometime, and sounds something between a cough and a hearty laugh. The breath is expended ; and to prevent suffocation, a violent effort is made during the fit to draw in air, which is accomplished with a loud sound or hoop. This often ends the fit, but in other instances only gives it a momentary interruption, and the coughing is renewed, till it is terminated by another long draught of air, or by vomiting. During the fit, the face be-

comes purple, the extremities cold, the child is violently agitated, supports himself by placing his hands on his knees, or grasps the nearest object, and to a bye-stander appears to be in danger of immediate suffocation, whilst sometimes blood gushes from the nose or ears.

There is a considerable quantity of phlegm expelled by cough or vomiting, at the termination of the fit, a great part of which may perhaps be formed, and forced up from the extremities of the wind-pipe, during the cough. The fits are generally worst in the night-time, and in particular habits are accompanied with a tendency to fainting, or may be productive of convulsions or insensibility.

In the mildest cases, there is little or no fever, the fits are gentle, and the hoop forms early; the health does not seem to suffer, and through the day the cough does not often take place spontaneously, but rather is brought on by some evident cause, such as eating much, running fast, or passion, whilst through the night it does not occur above three or four times.

But in more severe cases, the disease is preceded by, or accompanied with quick pulse, hot skin, drowsiness, weakness, and want of

appetite, with other symptoms which may be partly accidental. The cough is long of forming, it is severe and frequent in its attacks, excited by the slightest circumstance, and often comes on without any perceptible cause. It is also preceded, or followed by breathlessness, and sometimes by pain in the breast. Convulsions occasionally are excited by the cough, and sometimes are both severe, and frequently repeated. Stupor, and fainting, may also be produced.

This is a disease, which is always caused by contagion, and the effects of this seem to be more severe, and more frequently fatal, in some seasons than in others. No age is exempted from its influence.

It is extremely difficult to form an opinion in any individual case, of the probable duration or result of the disease. Even in mild cases, it usually continues for two months, and in those which are more severe, it may last for a whole season. In both it may, after having been some time away, be renewed by cold, or by change of weather, or by violent passion. The danger is generally proportioned to the severity of the complaint; but very mild cases sometimes prove suddenly and unexpectedly fatal. Children who were previously delicate and unhealthy, or who had a tendency to complaints in the

breast suffer more than others. The danger of chincough is two-fold; for the child may be instantaneously cut off by suffocation, or by a convulsion; or he may sink gradually under the severity of the disease, and the derangement produced in the lungs.

In order to allay the fever at the commencement of the disease, emetics, laxatives, the tepid bath, and occasionally the saline julep are useful. If the fever continue, notwithstanding these means, change of air is of great service.

Many remedies have been proposed for the cough, but we have no specific, if it be not change of air. It is wonderful how speedily this operates in some instances, both in allaying fever or restlessness, and the cough. The more complete the change, the greater is the effect produced, but it often happens, that after the child has been for a week or more in one place, the symptoms which were at first relieved, increase again, and require a new change. In many instances, however, one removal, from the town, for instance, to the country, is sufficient, and effects a cure in a few weeks. Continued travelling has no advantage over a change of habitation. It is considered as hurtful to make this removal before the hoop is formed, but of this there is no good evidence; yet although not injurious, it does not

appear to be generally useful, unless in those cases, where there are considerable fever or violent symptoms, resisting other means of abatement.

Emetics are highly serviceable in all cases, and especially with young infants, to whom it is sometimes necessary, to give them every day, for some time, by which we get quit of a great quantity of phlegm, which would otherwise be retained. Repeated vomiting, certainly diminishes the spasm, which takes place in the chest, and makes the cough easier ; it also abates feverishness.

Rubbing the spine and chest, with some stimulating embrocation, is also useful in mitigating the cough. Oil of amber, with the addition of hartshorn, camphorated oil of turpentine, or anodyne balsam, are very proper for this purpose. Oil of thyme forms the active ingredient, in a quack embrocation frequently employed. Juice of garlic has been rubbed on the soles of the feet, sometimes with good effect.

A variety of internal medicines have been employed, the most useful of which, act either as emetics or as anodynes. Of the first class, is a quack medicine, called the antipertussis, which contains white vitriol, a powerful, and often a useful emetic ; of the second class are opium, henbane, and hemlock, which have

sometimes the effect of allaying irritation. The two latter, when given in proper doses, are always harmless ; the opium on the contrary, in some instances increases fever, and does harm, especially if its costive effects be not obviated.

The diet should be light and nourishing, unless there be a tendency to inflammation. Full meals must be avoided, especially at night, but the child should eat frequently. Wine is hurtful in the commencement, but in the progress of the disease may be useful, and when there is much debility, is generally proper. Bark has been given along with it, but not often with decided benefit, with respect to the cough, though, if it be not nauseated, it tends to restore the strength.

Fixed pain in the chest, with difficulty of breathing, and fever indicating inflammation, will require the application of one or more leeches to the chest of young children, or the use of the lancet in those who are older. Blisters are also highly proper in such cases. The tepid bath, and laxatives, are both useful, and these with spare diet, where the inflammatory symptoms are not violent, will be sufficient without blood-letting ; which in this, and in all other tedious diseases, ought only to be had recourse to in urgent cases. Pain produced, merely by the violence of the

cough, and going almost entirely off after the fit, is removed by those means which relieve the cough.

If the fever continue, in spite of change of air and laxatives, it will, if there be no symptoms of inflammation, be necessary to use wine or cordials prudently, to support the strength.

If the child be of a full habit, and the cough very severe, it has been proposed to take away some blood, to prevent the rupture of a blood-vessel in the lungs. But unless there be also considerable uneasiness in the chest, or a bloody tinge of the expectoration, laxatives will in general be sufficient.

Convulsions may be produced by the rupture of a vessel in the brain, during a fit of coughing, and in this case, usually proves immediately fatal. Those which are not instantly fatal, proceed however, commonly from nervous irritation. They require the warm-bath, laxatives, and the remedies which I have pointed out, for the relief of convulsions. Change of air is proper and essential. Where the patient becomes emaciated and weak, or threatened with hectic, nothing is of so much benefit as country air, and milk diet, at the same time that we prevent costiveness. If there be, in this state, pain in the chest, small blisters are useful; or if there be watery swelling of the hands or feet, with livid counten-

ance, and harassing cough, the fox-glove will be necessary, and in some instances, brisk laxatives are required.

If the face or lips remain swelled, a course of sal polychrest is useful.

CHAPTER XVI.

Of Teething.

THE teeth are begun to be formed long before the birth of the child, but with a very few exceptions, none of them are so far advanced, as to come through the gum till he be some months old. The tooth is at first soft and pulpy, lodged in a cell of the jaw-bone, and covered with thick gum. There are only twenty teeth evolved in infancy, ten in each jaw, and these are not permanent. They generally begin to appear between the sixth and the eighth month, and the two middle incisors, or front teeth of the lower jaw, usually come through first, and in about a month, the corresponding teeth above appear. Then the two lateral incisors below,

and next those above, come out. About the twelfth or fourteenth month, the first, or anterior double teeth, appear on each side below, and then above. Between the sixteenth and twentieth month, the space between the first teeth and grinders, is filled up with those which are called the eye-teeth, and from this time till the thirtieth month, the other back teeth appear; so that when the child is two years and a half old, he generally has all his milk teeth. These continue till he is six or seven years of age, and then are succeeded by others, which are stronger, and more permanent. Many children cut their teeth with great ease, but others suffer considerably. On inspecting the gums of a child, who is not yet teething, they are found to be sharp, and the skin, which covers them, seems even to form an edge or seam along the gum. But when a tooth is growing up, the gums and the skin which covers it, are put on the stretch, and the appearance of seam at that part is lost. In consequence, partly of the distension of the gums, and partly of the activity of the parts, necessary for carrying on, and completing the process of dentition, we find, that the mouth becomes hotter than formerly. The child either grasps the nipple firmly and strongly, to relieve the gum, or if it be more tender, he is hurt, and suddenly rejects the

breast. The quantity of saliva is increased, the gum is itchy or painful, and the pain seems to be augmented suddenly, or darts through the spot as in tooth-ach; for the child is apt to scream without any other evident cause. From the irritation, we also sometimes find, that the gums or tongue become ulcerated. Besides these effects on the mouth itself, other parts suffer; the stomach is irritable, the bowels are frequently loose, or the skin is covered with a rash, or the ears, and eyes become inflamed. Sometimes there is a short cough, spasmodic affections of the breathing, fever or convulsions. These symptoms, are however, not always produced, and vary, both in number and effects, in different children. Those who are of a full habit, and robust, have more frequently symptoms of high vascular and nervous irritation, hot skin, troubled eye, and discharge of humour from the eye-lids, eruptions, short, disturbed sleep, screaming, and convulsions. They do not in general, lose much flesh, unless a violent purging come on; but they may, by fever or convulsions, be cut off speedily. Those on the other hand, who are small and spare, or delicate, suffer generally most in the bowels; they are sick, or dislike food, are peevish, have a continued purging, become emaciated, and sometimes, after prolonged sufferings, sink

completely exhausted. The symptoms which are immediately produced by teething, may by continuance, produce other or secondary effects. Thus the fever, if strong and obstinate, may excite water in the head, and the purging may give rise to incurable changes in the condition of the bowels. Lastly, teething may prove detrimental, when other diseases happen to occur at the same time, as for instance, hooping-cough, or scarlet fever. The simple effects of dentition, seldom continue troublesome above a fortnight at a time.

All the troublesome and dangerous consequences of dentition, may be produced by other causes ; and therefore, in forming our opinion, we must be influenced by the state of the gums and mouth, the absence of symptoms characterising other diseases, and the general appearance of the case.

In the treatment of the effects of teething, we have chiefly three objects : First, to allay irritation : Secondly, to alleviate urgent symptoms : and Lastly, to support the strength.

First: It is customary to give the child a gum stick, to rub on the itchy gum ; but if this be made of any hard substance, it is apt to injure the gum, or the child may knock it into his eye. A crust of bread is often employed, but if a piece of it break off in the

mouth, the child may be choaked. The fingers are instinctively used, nor is there any risk of the child, by being indulged in this respect, acquiring afterwards a bad habit. The most effectual mean of allaying irritation, is to cut the gum when it is distended or swelled. This is often indispensibly necessary, for the removal of urgent symptoms; it generally gives much relief, and is always safe and innocent. It does not, even if the incision should heal, render the future progress in any degree more tedious. It is not painful, but gives on the contrary, immediate ease.

Experience teaches us, that a costive state of the bowels, adds greatly to the irritability of the system; and therefore, if there be no looseness, it is always proper to give gentle laxatives, such as rhubarb and magnesia, during dentition. Cool air is highly useful, but the child, is not to be imprudently exposed, to a great degree of cold. He should be frequently out, and ought to have the cold bath in the morning, and be washed with cold water at night.

When there is considerable irritation, rubbing the spine, and surface of the belly, with a little laudanum is useful.

Secondly : In the treatment of urgent symptoms, we must, besides cutting the gum, which is a general rule, have recourse to such

remedies, as the particular nature of the affections require. When the fever is high, that is, when the skin is very hot, and the pulse quick, it is proper to give laxatives, and use the warm bath, morning and evening, in place of the cold water. If the child be lusty, and drowsy, indicating a tendency to affection of the head, it will be necessary to give a pretty smart dose of physic, and apply either one or two leeches to the forehead, according to the age. If these means do not speedily relieve the child, the head should be shaved, and a small blister put on. We never have cause to regret, having used prompt and decided means of preventing danger, but have much oftener to reproach ourselves with not having used early, those remedies which the result of the case shews to have been proper.

Spasms and convulsions require the warm-bath, rubbing with laudanum, and a calomel purge, together with all the attention, which I have recommended in considering convulsions. If these affections are apprehended from starting, or slight spasms, a gentle emetic is very useful; or if they occur frequently, or leave remains behind them, laxatives are proper, and a combination of tincture of asafoetida, and of hyocianus, may afterwards be given.

Purging, if severe, or attended with weak-

ness or emaciation, is to be restrained, by giving clysters with laudanum; and occasionally small doses of calomel or rhubarb, when the stools are unnatural, as has been formerly recommended.

Sickness, loathing of food, and ill-smelled breath, are relieved by a gentle dose of ipecacuanha.

A short cough, as well as tenderness of the eyes, will be removed by a burgundy pitch plaster, applied to the back. Ulceration of the gum requires gentle laxatives; the strength is to be supported, and the parts bathed with port-wine and water.

Thirdly: The strength is to be carefully supported under the irritation, and the other distresses, by the breast-milk, if the child be not weaned, or beef-tea, arrow-root, milk and water, &c. if he be. In some cases, where the child is recently weaned, it will be of advantage to give him the breast again. If he do not take sufficient food by the mouth, nutritive clysters must be resorted to. In every instance, nourishment is essential; but in some, particularly when the weakness is increasing, cordials, such as wine-whey, must be added. It is scarcely necessary to observe, that as a mean of supporting the strength, we must restrain excessive, or continued evacuations, such as purging. Whenever the child be-

comes greatly emaciated, it will generally be found, that the looseness has been neglected, or has resisted the treatment.

As connected with the subject of dentition, I may remark, that when any of the first set of teeth become loose, or decayed, and at the same time irritate the gums, producing ulceration, they should be extracted.

When any of the first are interfering with the second set, those, whose removal will most effectually promote the regularity of the permanent teeth, ought to be taken out. When two of the second set are so distant from each other, as to make those next them grow out of the crub, or become uneven, they should, as soon as may be, be brought gradually together by means of a wire.

Buck-teeth ought to be early pulled, which is generally better than attempting to bring them into their place.

CHAPTER XVII.

Of Water in the Head.

HYDROCEPHALUS, or water in the head, is one of the most fatal diseases of children, and unfortunately, it is of very frequent occurrence. It may take place, either as a primary or secondary disease, and the primary may either be rapid or protracted.

The rapid or acute species, is always marked in its commencement, by a high degree of action in the vessels of the brain, if not, by actual inflammation of some of the membranes of that organ. And in this case, the effusion of water is to be considered as the consequence of that previous diseased state. The appellation, then, of water in the head, is given to the disease from its termination, and not from the condition which prevails at its commencement. The protracted, or chronic species, on the other hand is not necessarily

attended with high action at the outset, but may be, and often is, an effusion in consequence of debility of the functions of the brain, occasioned by various causes and circumstances, and it is to this species alone, that the name of dropsy of the brain can be properly given.

The secondary hydrocephalus, is not less frequent than the primary. It is water in the head succeeding to some disease, which had not necessarily any direct tendency to produce effusion there. I have long remarked, and the fact is admitted by most practitioners, that every febrile disease of infants, tends to excite disease in the head. This is easily explained; for anatomists know, that there is a prodigious quantity of blood, circulating in the brain, and the vessels there are large and numerous. Now, when the whole of the vascular system is acting inordinately, an organ so constituted, must be peculiarly apt to suffer. This aptitude is the greater, the younger that the child is; for in infancy, the brain is more tender and more vascular than in childhood. In a young foetus, it is altogether fluid, and causes which may perhaps be very slight, but which we cannot determine, sometimes produce water in the head, and great enlargement of the skull before birth.

Primary hydrocephalus, may be occasioned

by falls or blows on the head, by the sudden removal of an external discharge, or cutaneous affection, and by every cause capable of exciting immediately the action of vessels in the brain. Continued costiveness, or derangement of the bowels, may act, if not as an exciting, at least, as a predisposing cause. Some families of children, have the brain so delicately constituted, as to be particularly liable to this disorder.

Secondary hydrocephalus frequently succeeds teething-fever, and sometimes those fevers which originate from a bad state of the bowels.

It is not easy to give a general history of this disease, for the symptoms vary somewhat in their order and degree, according to the age and constitution of the child, and other circumstances.

When the patient is old enough, to give any account of his sensations, we generally find, that hydrocephalus begins with pain, more or less severe in the head, and perhaps confined to one side of it. This continues often for some days, and seems to go off entirely at times, and then returns, so that the child alternately complains, and is well, but the pulse is always somewhat quick. Then, after a longer or shorter period, the symptoms become more severe, and the child se-

riously complains, or seems to have an attack of fever. This is attended with chilness, and is very early succeeded by vomiting, which continues for a day or two, and the matter thrown up, is usually bilious. The bowels are commonly costive. The skin is hot, and the pulse exceedingly quick, and sometimes irregular. The eyes are very sensible to the light, so that the curtain must be closed. The sleep is disturbed, and interrupted suddenly as if by a dream, and both when asleep and awake, he early begins to moan, and seems to be oppressed. The cheeks are alternately flushed and pale. He has no appetite, and not much thirst, at least, does not care to ask drink; often, when he rises to take it, he seems to have his headach and sickness increased by the motion, and becomes giddy when he sits up. He starts frequently, grinds his teeth, picks his nose, and tosses his hands above, or over the head. Sometimes he is very early delirious, and is apt to scream suddenly, especially when slumbering.

When these symptoms have continued for a short time, at farthest, for eight or ten days, the pupil of the eye becomes dilated, the patient generally squints, and does not complain so much as formerly of the light. In a few cases, the vomiting, which had gone off, is renewed. The pulse becomes slow, being

sometimes below sixty in the minute, and intermitting. He does not complain so much of the headach, for he is less sensible ; but he moans or screams most piteously. In some cases, he remains sensible, answers distinctly, and knows what is doing, till the stupor which precedes death comes on ; in others, he is very incoherent and insensible. Presently, the pulse becomes again quick, beating perhaps, a hundred and sixty in the minute. The urine is either retained, so that the bladder is distended, or it, as well as the stools, comes away involuntarily. One side becomes paralytic, and the other is perhaps convulsed ; indeed, convulsions may come on at any period, even at the commencement of the disease. Before death, the eyes become glazed, the features much altered, the breathing noisy and oppressed, the pulse extremely weak, the feet cold, and the child, by a state of complete stupor, is spared those pangs of separation, which wring the heart of the parent.

It thus appears, that in the most distinct and regular form of the disease, there are three stages. In the first, the symptoms are decidedly those of a fever, accompanied with an affection of the head. In the second, the pulse is slow, and symptoms of pressure on the brain appear. In the last, the pulse again

becomes quick. I must observe, however, that sometimes, the pulse at no time becomes slow.

This disease, generally runs on till the twenty-first day, if the patient be above two years old. But with young infants, it often proves rapidly fatal, carrying them off in four or five days. Infants are unable to give an account of their sensations, and therefore, we cannot be certain of the existence of this disease, till symptoms of oppressed brain come on; but we may suspect it, and ought always to act on the presumption of its approach, when they have a high fever, cannot bear the light, vomit, and are costive, start, and awake suddenly in a terror, are much oppressed, and put the hand frequently and quickly, to the temples, as if to rub off something. I have mentioned in this description, that costiveness attends the disease; but in some instances, the child purges a glossy, green coloured stuff, and, generally, green, or dark stools, are brought away by physic.

There are chiefly two diseases with which this can be confounded, fever from teething, and fever from a bad state of the bowels, which I shall presently describe. The first of these may be distinguished by the symptoms indicating dentition; but it is to be remembered, that if there be in this fever much

determination to the head, it may give rise to secondary hydrocephalus. The marks of the other fever, I shall hereafter point out.

Upon dissection, a quantity of water, generally clear as crystal, is found in the ventricles of the brain.

A variety of remedies, have been proposed for curing this formidable complaint, but much and melancholy experience convinces me, that none can be depended on, after effusion of water has taken place. It is only in the first stage, and very early in that stage, before water is formed, that our treatment can be successful. Unfortunately, at this time, the symptoms are not such as to impress the mind of parents with a belief, that it is more than a common fever, which it is hoped may soon abate. Practitioners sometimes from the same delusive expectation, and from a backwardness to propose remedies, which by indicating great danger, would give rise to great anxiety, may fall into a similar error; and although their intentions are humane, the result is a matter of the utmost regret. If this book then, shall serve no other purpose, than calling the attention of parents to the present subject, I shall not have written in vain. I would beg of them to recollect, that in the disease, termed water in the head, there is in the commencement, actually

no water existing ; therefore, the case is then not to be considered, as so dangerous as it must afterwards be. The application of suitable remedies, and even an avowal of an apprehension of this disease from the practitioner is not to be looked on as the death-warrant of the patient. So far from this, these remedies bid fair to arrest the progress of the complaint, and in two days, may remove the symptoms of danger.

Whenever a child complains of symptoms of the first stage of hydrocephalus, no time ought to be lost in guarding the head from danger. This is done by brisk purging, and the prompt application of leeches to the temples. By these remedies employed in the first day, or even in some cases, so late as the third day, the headach may be relieved, and the fever much abated. The child is to be kept very quiet, and the food is to be of the lightest kind. In the variable state, which precedes the decided attack of fever ; in that state, when the child is alternately well and ill, and has attacks of pain in the head, two or three times a day, these means, particularly the application of leeches, rarely fail in giving complete relief, and may check for ever the tendency to this disease. But if they have been neglected at this period, during which the practitioner unfortunately sel-

dom sees the child, the parents themselves, thinking nothing of the matter, then, on the decided attack, they are to be more vigorously used. The purges must be repeated two or three times, and the leeches applied oftener than once, if the pain recur, or do not go entirely off. The head is to be shaved, and bathed frequently with cold vinegar, and a blister must be applied. If these means fail to procure relief, it is much to be feared, that the disease has made a progress, which puts it beyond controul. Mercury, digitalis, issues, and other remedies are usually employed, but generally without success; nor is it necessary for me, to pursue the subject beyond the first period, the period when it is chiefly useful for a parent to know, or a practitioner to prescribe for, this disease. In the course of the malady, the comfort of the patient may be promoted, by great attention to cleanliness, and giving occasionally, a small quantity of beef-tea, arrow-root, or ripe fruit; and for drink, gruel, lemonade, or in the advanced stage, wine and water. Relief is sometimes obtained to the pain, by placing the hand on the head.

Some families are peculiarly liable to this disease. These children require to have great attention paid to the state of the bowels, and must avoid heavy and indigestible diet. Fa-

tigue is hurtful, and exposing the head to much heat, especially the rays of the sun, is dangerous. In some instances, particularly when there are evident marks of a determination to the head, besides frequent laxatives, it is useful to have recourse to an issue; and in every case, the earliest and slightest marks of disease must be attended to.

The chronic hydrocephalus, attacks more slowly, and runs its course with less speed. In some cases, it seems to be slowly coming on from birth. In other instances, it is years before the symptoms appear. The child is dull, has a large head, and generally wide pupils of the eye. He is very subject to headache, and slight feverish fits, attended with giddiness, and often with pain or stiffness in the neck. The bowels are costive, and the water is scanty, and passed often with difficulty. The skin is hotter than usual, the pulse quick and irregular, though sometimes it very early, and for a long time, is found slow and intermittent. The head enlarges, if the progress be very slow, the body wastes, the powers of the mind decay, the pupils are dilated, the child squints, palsy comes on, and not unfrequently, convulsions take place. The urine is retained, so that the catheter is often required; the pulse, from being full and slow, becomes weak and fluttering, and the

patient dies in an apoplectic state. These symptoms sometimes continue in a moderate degree for years, but generally, only for some months, or a few weeks. The degree of enlargement of the head, does not always depend on the duration of the complaint.

On dissection, the ventricles of the brain are found greatly distended with water. In some cases so much, as to make the brain resemble merely two bags of water. The bones of the skull, are sometimes found very thin, and separated much from each other, and occasionally at the bottom of the cavity, the bones are very ragged and irregular.

The practice consists in the use of calomel purges, repeated blisters applied to the head, or the establishment of an issue on the scalp. Digitalis combined with mercury, has more effect in this than in the acute hydrocephalus, for this is more strictly, a species of dropsy. If these means lessen the size of the head, a bandage must be applied round it, by way of support; and indeed, gentle pressure in this way, assists the operation of the medicine. If it be neglected, convulsions come on, when the bones becomes slack.

The secondary hydrocephalus, is both a frequent and a deceitful complaint, for as it occurs in the course of some other disease, the first set of symptoms call the attention

off to a different point. It is therefore highly prudent, in all diseases of children, to watch the head; and whenever symptoms appear, indicating an affection of that organ, it is necessary to shave it, apply a blister, and in some instances, one or more leeches. Indeed, it is a good rule, in all protracted diseases, if there be the smallest ambiguity, to shave the head, apply a small blister, and give calomel purges.

CHAPTER XVIII.

Of Fever.

FEVER, proceeding from different causes, is a frequent disease of children. I have already noticed that produced by the irritation of teething, and now proceed to describe another species, very common, and exceedingly obstinate, if not early attended to. It is either produced speedily, after eating some improper and indigestible food, or the

foundation is laid more slowly, by a previous state of costiveness, or disordered condition of the bowels. In the first case, it sometimes attacks very suddenly, after eating unripe fruit, or garden trash, or almonds, or pastry, and particularly, that kind of cake, called short-bread. In other instances, the symptoms do not come on for a day or two. The fever generally begins in the afternoon, the child is not disposed to eat, is peevish, the hands are warm, and the pulse is quick. He complains when touched, although not hurt, and can hardly tell why. In the evening he becomes sick, or vomits, is very hot, restless, and thirsty, but generally, the tongue is clean. Through the night, he is much disturbed. Next day the tongue is furred, or white, but he is rather better and livelier in the morning. In the afternoon, however, the symptoms increase, and the disease goes on as the variety, which I shall next describe. In some instances, the disorder attacks more speedily. The child perhaps, when going out, complains a little of the head, becomes worse when walking, and returns, crying with pain in the forehead, is pale, hot, and the pulse quick, and if not soon relieved, has a very serious and obstinate fever established. The headach in this fever, depends on the state of the stomach. It goes off at times en-

tirely, but always returns before a fit of sickness or vomiting.

There can be no doubt as to the cause of this disorder, and there is little difficulty in checking it at once, by giving, on the first appearance of indisposition, a dose of ipecacuanha, and afterwards a smart purge. If the emetic be delayed for some hours, or till next day, it may mitigate, but seldom entirely removes the disease. It is astonishingly difficult, often in these fevers, to move the bowels. Large doses of physic produce very little effect; often, after being retained for some time, they are vomited. In this case, they must be assisted with injections.

The other variety, the consideration of which will include the farther treatment of the last disorder, begins often more gradually, the child being for a day or two unwell, before he be altogether confined to bed. In the day time, he has several attacks of feverishness, during which he is dull, languid, and disposed to lie down or sleep. In the intervals, he seems pretty well, but is easily put out of temper. The appetite is whimsical, and he cannot eat what he asks for. He has little thirst, and at this time, the tongue is pretty clean. The bowels are generally bound, but sometimes loose, and in this case, the stools are offensive. These symptoms may

continue a day or two, or even for a week, before the child become so ill as to keep his bed, or to have a formed complaint. Then an acute paroxysm of fever takes place, generally preceded by shivering, and attended by vomiting; the pulse becomes very quick, and runs so high sometimes as a hundred and forty in the minute. The cheeks are flushed, and the patient drowsy, but he has no pain in the head, nor any where, unless, perhaps, in the belly; for in some cases, he is sadly tormented with gripes, or even fixed pain in the bowels. The tongue now becomes foul, and the bowels appear to be very torpid, the appetite is totally lost, or what food is taken, is not digested. The stools are foetid, dark coloured, sometimes like pitch, or thin and olive coloured, or green and curdy-looking. The breath is offensive. There is a great desire to pick the nose and lips, so that sometimes, if the child be not watched, an ulcer may be produced. The fever does not continue alike severe, during the whole day, but becomes less at times, though not at any stated hour. Each exacerbation is attended with drowsiness. The face is occasionally flushed, and the eyes suffused; at other times it is pale, and the eye dull and white. Generally delirium occurs in the course of the disease, but by speaking to the child he can be recal-

led from this, and answers correctly ; or although sometimes delirious, yet for an hour or two, he may be tolerably distinct, and insist obstinately on being carried out. The debility in many cases is excessive, the child picking the bed-cloathes, whining in a fatuitous manner, and staring vacantly ; yet even in this state, he may often be roused, and seems to understand, at least so far, as to reject what he dislikes. This disease runs on for a week or two, or even for several weeks, during which time, the appetite is very trifling, the thirst not urgent, the strength exhausted, the body wasted, and the feverish symptoms varying a little, but not greatly, in degree. If the fever continue obstinate and violent, the belly become swelled, and the debility and stupor increase, the danger is great.

This fever bears a resemblance to hydrocephalus, especially in the commencement. But in hydrocephalus, there is more frequent vomiting, and the pain in the head is generally severe ; whereas, in this fever, there is either no pain, or it is evidently connected with the state of the stomach. By a general and careful comparison of the two diseases in their progress, a practitioner in most instances, may form a correct distinction.

It is generally proper, to commence the treatment of this disease with an emetic of

ipecacuanha, succeeded by a brisk laxative. This practice, if adopted during the state of indisposition, which precedes the complete formation of the fever, will cut short the symptoms; and if laxatives be afterwards administered, till the bowels are brought into a correct state, a perfect recovery is the consequence. If however, the fever have fairly taken place, we cannot expect immediately to remove it, but must be satisfied with a slower process. The great remedy, still to be depended on, for mitigating the disease, and abridging its duration is purging, which is proper in every instance; for if the patient be not costive, the stools are at least unnatural. In some instances, the usual doses of medicine will be sufficient; but often the bowels are so torpid, that much larger doses will be required. This is a point of practice, which requires discrimination; for if the dose be not sufficient in quantity to purge, or if it be not repeated, so as to evacuate the morbid contents of the bowels, we come short of our object. On the other hand, if the purging be carried farther, we weaken our patient, injure still farther the intestines, and may bring on an irrecoverable loss of tone, so that the bowels are expanded with wind. Two circumstances will direct us in this matter; the state of the stools, and the effect on the pulse,

and on the strength. When the stools are foetid or unusual in colour or appearance, purgative medicines are not unnecessary. When these remedies do not exhaust the patient, and render the pulse more frequent and smaller, they do good, and have not been pushed too far. With regard to the dose, that ought to be no greater than is adequate to the effect. At first it is useful, and often absolutely necessary, to give one or two brisk and large doses, but afterwards, it is usually better to give, only such doses, as will keep the bowels open, and support their action. Where there seems to be much irritation or pain of the bowels, an opiate clyster may be also given occasionally, and with much advantage. The belly is likewise, if there be much pain or griping, to be fomented, and rubbed with anodyne balsam.

During the use of purgative medicines, worms are frequently expelled, which has given rise to a belief, that they occasioned all the symptoms, and hence this has been called a worm fever. That they may increase the disease, or, if in great quantity, may immediately produce it in some instances, I allow; but in many cases, they never appear, and therefore the appellation is improper. Whether they exist or not, is not of so much consequence, as may at first appear, for it is by

all admitted, that the cause of the fever consists in a morbid state of the bowels, and that this is to be removed by purgative medicines, which are equally good for expelling worms.

But although purging, under the restrictions I have made, be a proper practice, yet it is not the whole of our practice. In the early stage, we employ such other means as allay fever. When the heat of the skin is considerable and steady, sponging the surface with cold vinegar and water, is of service. If this give much relief, and for a few minutes bring down the pulse, and abate the heat, the cold affusion of water, as recommended in the scarlet fever, may be safely practised; but it is not to be repeated oftener than once, if it do not give more than usual relief; nor is it to be employed with expectation of permanent advantage, unless immediately after the hot stage have been fully established.

When the sponge does not give relief and comfort, and the skin is hot and parched, the saline julap, with a little antimonial wine, is useful, not to bring out a copious perspiration, but a gentle moisture, or softness on the surface.

From first to last, light and nourishing food must be given in such portions as the patient can take. Beef-tea, arrow-root, &c. are very

proper. Toast-water, whey, milk and water, lemonade, ripe fruit, &c. are useful for quenching thirst.

In the advanced stage, small doses of wine must be given, and always do good, unless they produce restlessness, heat, and flushed cheeks.

Hyocyamus is sometimes useful to procure sleep. Opium is more beneficial, and safer, if given in a clyster than by the mouth.

Decoction of bark, tincture of steel, and other tonics, are also proper, after the bowels have been freely purged, provided they do not produce sickness. It is to be recollected, that preparations of iron render the stools black.

Delirium is sometimes, but not always mitigated, by shaving the head, bathing it with vinegar, and applying a small blister to it.

Great attention is to be paid to cleanliness and ventilation, and when convalescent, a removal to the country is of much benefit, in confirming the health, and removing hectic appearances, and copious nocturnal perspiration, which often succeed this disease.

Young infants are subject to a variety of this fever, which begins with loss of appetite, restlessness, fretfulness, hot skin, quick pulse, and continual drowsiness, with bad smelled breath, and appearance of being hurt

if touched or moved. There are generally distinct remissions, during which, the child is easier, and takes the breast. There is no appearance of teeth, which distinguishes this from teething-fever. It is more apt to be mistaken for hydrocephalus ; but in that disease, there is more impatience of light, heat in the head, screaming, or awakening suddenly and in terror, &c. and in the advanced stage, the symptoms of oppressed brain are evident. The treatment is to be conducted on the principles already laid down, particularly, by procuring stools ; for it will generally be found, that the bowels have been previously costive, or in a bad state.

Children are also liable to the common nervous, or typhus fever, if exposed to contagion. It is not unusual, when this disease gets into a family, where ventilation and cleanliness are neglected, for it to attack in succession, every one, from the eldest to the youngest. It approaches, generally in a slow manner ; the child looks pale and wan for a day or two, the appetite is impaired, the sleep unrefreshing, the skin of a dirty appearance, and the tongue white. Then a chilly fit comes on, or, without any great sense of coldness, the fever invades with a feeling of weariness and oppression, the pulse becomes frequent, vomiting or squeamishness come on,

the head is painful, the skin hot, and the eye dejected, or sunk. These symptoms have generally a remission, once in the twenty-four hours. If the disease gain ground, the weakness increases, the pulse becomes more rapid, delirium takes place, and then the child sinks into a state of stupor, the eyes are half closed, the teeth covered with a black crust, and the stools are passed without knowledge. This state soon ends in dissolution. The disease may continue a fortnight, or three weeks, or even longer.

This fever is to be attacked at the very first with an emetic, succeeded by a pretty smart purge. If the skin be very hot and dry, and the child do not at the same time feel any chilliness, the affusion of cold water will be very serviceable in the early stage. But if this be neglected, or not practised, then we are to sponge the surface with cold water and vinegar. If the head be painful, one or two leeches, according to the age, are to be applied, in the beginning, to the forehead; and if the pain continue, and delirium approach, the head is to be shaved, and a small blister applied. If the skin be parched and hot, and the sponge afford no permanent relief, saline julap, with a little antimonial wine, will be proper. The bowels are, during the whole progress of the fever, to be

kept open, and occasional purges are of much benefit, when the stools are offensive or unnatural. When there is much oppression, and a dry foul tongue, a smart dose of calomel often gives much relief, by evacuating dark bilious stools. The diet should consist of stewed apples, beef-tea, panado, &c.; but in general, very little is taken. Gruel, toast-water, or lemonade, form proper drinks, and ripe fruits, are both grateful and useful. In the advanced stage, cordials, particularly wine, should be given prudently.

When the fever abates, care must be taken to prevent any considerable exertion, or any error in diet, either of which might cause a relapse. Nothing confirms the health, or removes the consequences of fever, so effectually, as going to the country.

CHAPTER XIX.

Of Emaciation.

THERE are two species of general emaciation, or wasting, proceeding from the state of the bowels, and independent of any affection of the lungs. The first arises from torpor or want of vigour in the intestines, without any glandular affection. It is generally brought on by costiveness, and accelerated by improper or indigestible diet. It is characterised by a gradual loss of flesh, and of strength, an enlargement of the belly, loss of appetite, or a desire for extraordinary or improper substances, ill-smelled breath, slight thirst, pale, unhealthy countenance, swelled upper lip, and obstinate costiveness ; or if the bowels are open, the stools are foetid, and dark coloured, and the patient has previously been costive. In this condition, he remains for some time ; he is listless, and evi-

dently falling off; but has no fever. His appearance excites uneasiness, but coming on gradually, it does not excite so much alarm as it ought. An inquiry at this period would shew, to any intelligent person, that the bowels are greatly disordered. There is usually costiveness, and the stools are extremely offensive. How many children might be saved by attention to the digestive organs! Under circumstances, such as I have described, a few doses of brisk purges, would restore the appetite, strengthen the bowels, and prevent fever and other serious evils. But unfortunately the child is supposed merely to have worms, and either remedies are daily postponed, or tansy, and such like substances, are employed. If the disease be neglected, the pulse presently becomes quick, the cheeks flushed, the skin hot and dry, the appetite is entirely lost, the child starts from his sleep, grinds his teeth, picks his nose, his weakness increases so much, that he is confined to bed, the emaciation proceeds, but the belly becomes hard and more swelled, the stools to the last are unnatural, and after a few weeks of suffering, death closes the scene.

The prevention of this deplorable state, is to be effected entirely by careful attention to the bowels, an object, I earnestly wish to impress on the mind of every reader. Even

after the disease is completely established, the great remedy consists in repeated purges, which must be regulated in their quantity and frequency, by the effects produced, and these must be judged of, by a skilful practitioner. The remedy is simple, but judgment is required in determining the degree. Three circumstances require consideration. First : The accomplishment of our purpose, in procuring stools, natural in appearance and smell. Secondly : The effect of our doses on the strength. Thirdly : The change produced on the general face of the disease.

Besides purges, such as aloes, rhubarb, senna, jalap, calomel, &c. varied, according to circumstances, we may also derive advantage from the use of some strengthening medicine, such as a light bitter infusion of colomba. The diet must be digestible and nourishing, such as sago, arrow-root, beef-tea, calves-feet-jelly, chicken, &c.

The other species of wasting, is connected with, and in great measure dependant on, a diseased state of the glands, through which the vessels, that absorb the nourishment from the intestines, must pass. Emaciation in this case, is produced, not merely from the effect of disease on the constitution, but also, by an actual obstruction to the transmission of nutriment. We cannot determine all the causes

capable of exciting this state, but a very powerful one, is a torpid state of the bowels, such as that occasioning the more simple species of wasting, already described. Another, seems to be the existence of some severe or prolonged disease, which debilitates and injures the glandular system. Damp, cold, improper and scanty diet, also appear to act as causes.

These different circumstances may, in any constitution, perhaps, occasion this disease, but it is chiefly in a scrofulous habit that they operate. On this account, many have considered *tabes mesenterica*, as merely a variety of *scrofula*, but it will perhaps be more correct to say, that *scrofula* only gives a very strong predisposition to the disease; for cases occur, where we can discover no other mark of that constitution.

This disease, does not generally appear before the time of weaning, nor after the age of puberty. In infants, we suspect it, when the stools are frequent and unnatural, the belly tumid, and the urine whitish, when the food passes through imperfectly digested, the child vomits occasionally, is fretful, feverish, has a short cough, and an uneasy respiration, and gradually loses flesh and strength. Elder children exhibit at first, very much the symptoms of the first species. The looks are

unhealthy, the belly is enlarged, the appetite is fastidious, or much injured, the bowels irregular, and the urine white and thick. The skin is dry and hot, and the fat wastes away. Then, sharp shooting pains, of momentary duration, are felt in the belly. The stools are sometimes costive, oftener loose and frothy. The face is pale, the features sharp, the eyes sunk and glossy. The belly enlarges more, becomes hard, and when struck, sounds like a drum, and we can even sometimes feel the hard enlarged glands within. The fever becomes more distinct, the tongue is generally clean, but in some instances, we find a crust on it, and in the termination of the disease it becomes sore, and the throat is tender. The feet swell, the forehead is covered with perspiration, and the whole body perspires through the night. In some cases, the vital spark dwindles away very gradually; in others, towards the end, the symptoms suddenly increase, and the patient dies sooner than is expected. On inspecting the body, the mesenteric glands are found enlarged, and containing substance like cheese, or, occasionally, purulent matter.

In the commencement of this truly dangerous disease, the daily use of small doses of calomel, conjoined with rhubarb, in quantity sufficient to keep the bowels in a regular

state, is of advantage, but it is not useful to purge freely, as in the first species. Gentle and pretty long continued friction, three times a day, over the belly with anodyne balsam, and the use every night, of the warm salt water bath, will be proper. The occasional application of small blisters to the belly, the exhibition of a light bitter infusion, and supporting the strength with suitable nourishment, constitute the rest of the practice.

When the disease has passed its first stage, and the fever is considerable, we may mitigate it, and also reduce the size of the belly by purges. If these produce the desired effects, they are useful; but otherwise, we do not find it proper to continue them in expectation of removing the glandular affection. In that case, it is sufficient to give such doses as obviate costiveness, if it exist, or render the stools more natural, if there be looseness. If the discharge be considerable and debilitating, it is necessary to be very prudent in their exhibition, and sometimes to employ an anodyne clyster. Friction, and the warm salt water bath, ought still to be continued.

It can serve no good purpose, in this work, to be more minute, and to enumerate remedies, which though often employed, seldom do any good.

CHAPTER XX.

Of Worms.

WORMS of different kinds, are found in the bowels, but there are chiefly two, met with in children, the lumbricus, or long worm, having a general resemblance to the common earth worm, and the ascaris, or small white worm, like a bit of thread. These two kinds inhabit different parts of the bowels, for the ascarides are confined to the under part, or straight gut, whilst the lumbrici are found much higher. It is extremely difficult to account for the production of worms, as they are totally different from those found in the earth, or on vegetables. It is evident, that they cannot be of external origin; but how they come to exist in the bowels of a child, is a very difficult question to answer. It has been popularly supposed, that particular kinds

of food, or sweat-meats, or unripe fruit, breed worms ; but this is only true, in so far, as these disorder the stomach and bowels, and weaken their action, for worms rarely appear, when the action of the bowels is vigorous. It is also observable, that few infants have worms, till after they are weaned, which is to be accounted for, on the principle, that the bowels are in better order during suckling, than afterwards, when the diet is more varied, and indigestible.

Worms may exist without producing any symptom, until they either accumulate in considerable quantity, when they cause more or less irritation in the bowels, or some slight indisposition takes place, and they by their irritation, increase it. All the injury they produce, is that of irritation, but the degree of this, and the effects of it, must vary, not merely according to the number of worms, and their movements, but also according to the state of the bowels themselves. It is also to be remembered, that as a weakened state of the bowels is favourable for the accumulation of worms, many of the symptoms may proceed from that state alone, independent of the new irritation.

The lumbrici, may be suspected to exist, when the child complains of frequent griping, or pain in the belly, has repeated, and unex-

pected attacks of looseness, variable appetite, being sometimes seized suddenly with extreme hunger, has swelling of the belly, especially at night, disturbed sleep, frightful dreams, and grinding of the teeth. Besides these symptoms, we also observe, that the countenance is alternately pale and flushed, he picks the nose, has foetid breath, dry cough, and sometimes slow fever, or convulsive affections. These symptoms may exist in different degrees, and are ultimately attended with the expulsion of worms, either by vomiting or stool. It has been supposed, that a very obstinate and protracted fever, called worm-fever, might also be produced, but this generally depends more upon costiveness, or a deranged state of the bowels, than simply upon worms. I have already noticed its symptoms and treatment, and also its resemblance to a most formidable disease, the water in the head.

A variety of worm medicines, have been employed, such as tin powder, tansy, sulphur, hellebore, worm seed, cowage, indian pink root, &c. In general, however, we find, that with children, the most successful plan is to give frequent and repeated purgatives, to expel both the worms and morbid stools, and also to excite, and support, the due and vigorous action of the bowels. For this purpose,

the occasional use of a suitable dose of calomel, and the regular employment, on the intermediate days, of aloetic pills, if the child can swallow them, will be effectual. The extent to which this plan is to be carried, and the period for which it must be continued, will depend on the effects produced. As long as the stools are foetid, and unnatural in appearance, or as they contain worms; and as long as the medicines invigorate, instead of weakening, we may be sure, that it has not been carried too far. Under it, the appetite increases, and the health and looks improve. In many cases, where worms are suspected, this method effects a cure, although none are expelled. In such instances, it is not unusual for much slimy, or ill-looking matter to be evacuated, which parents suppose, is produced by the worms being dissolved. This is not correct, and it is most probable, that the symptoms proceed from some other irritation of the bowels, removeable however, by the same means. It may be proper to remark, that often after other remedies fail, calomel or jalap, in such doses, as operate powerfully, and bring away slime or mucus from the bowels, will carry off the worms, by removing so much of their favourite residence. Besides purgatives, it will also be proper, afterwards, to employ tonics, such

as bitters, and preparations of iron, in order to strengthen the bowels, and invigorate all the digestive organs.

Ascarides, besides producing griping, paleness, picking of the nose, disturbed sleep, &c. are discovered by the itching they produce at the lower part of the bowel. This is greatest at night, and sometimes exists to an intolerable degree, and from the irritation excited, even retention of urine may be caused. We are also confirmed in our opinion, by frequently observing the worms in the stools, and sometimes, they even, spontaneously, creep from the bowel. This kind of worm, is removed like the last, by smart purgatives, and prevented from being increased, by strengthening remedies. But besides these means, we possess the power of applying to that part of the bowel, which they inhabit, substances directly, in the form of clysters, capable of killing them. For this purpose, the common salt injection is useful, but one, containing aloes, or consisting of salt, oil, and a strong decoction of chamomile flowers, will be still more effectual. It may be given every second night, for some time; afterwards, once a week as long as any symptom remains.

CHAPTER XXI.

Of Mumps, or Branks.

THE disease called Mumps, is a swelling of the parotid gland, which lies before the ear. It is an infectious disease, and begins with chilness, succeeded by heat, frequent pulse, thirst, and headach. Very early, a small tumour can be discovered near the angle of the jaw, which presently increases, so that not only the back part of the cheek, but the side of the neck becomes swelled, and the jaw is stiff. There is however, no sore throat, and seldom any difficulty, either in swallowing or breathing. The swelling gradually abates, about the fourth or fifth day, and the patient soon gets well. This is a very slight disease in general, and nothing farther is required, than keeping the part moderately warm, by means of a piece of flannel, and abating the fever by spare or vegetable diet, and a dose of physic.

CHAPTER XXII.

Of Diseased Liver.

THE liver becomes diseased in children, more frequently than many suppose. It may inflame rapidly or slowly.

In the first case, the symptoms are very acute. After being greatly heated, or suddenly exposed to cold, but especially, after eating something heavy and indigestible, such as nuts, pastry, sweet-cake, &c. the child is seized with sickness, and violent pain like colic. This pain is felt chiefly in the upper part of the belly, near the stomach, and is attended with chilness at first, and afterwards heat of the skin, and thirst. Sometimes, very early, the eye becomes yellow, and the urine very high coloured. Presently the colic pain abates, or goes off, and the child complains only of a dull pain in the right side, or occasionally only of pain in the top of the

shoulder. He has a short dry cough, frequent attacks of sickness, white tongue, no appetite, though at times, he thinks he can eat, and is distressed, particularly at night, with fits of breathlessness. The bowels are generally bound, and the stools are light in the colour, but sometimes they are dark and offensive. The fever continues, he is very restless, and gets no sleep, or very disturbed sleep, and if he be not either soon relieved, or quickly carried off, he becomes greatly emaciated, at the same time, that the feet and belly swell from water. In this case, the weakness generally increases, and the patient is at last carried off, quite exhausted. There is another way, in which the disease may terminate, namely, by suppuration. The abscess in the liver may burst, either into the lungs, and the matter is coughed up, or into the stomach or bowels, when it is discharged by vomiting or stool; or it may burst into the general cavity of the belly, and cause swelling very like dropsy. In this, which is a very rare case, many pounds of matter have been drawn off by tapping, or discharged by a natural opening taking place at the navel.

The treatment of this disease consists in the early employment of blood-letting, if the pain be acute, and the fever considerable.

In slighter degrees of the complaint, free and plentiful evacuation by purgatives may be substituted for the lancet; and after the bowels have been well emptied, occasional laxatives are still to be employed. Blisters are also to be applied to the side, over the liver, and a course of mercury is immediately to be commenced. It is however unnecessary to give minute directions for the particular management of this disease, as no parent can with prudence undertake it. I may only add, that when the existence of this complaint is suspected, and the child is in the country, the most prudent plan will be, to give a smart dose of calomel, and apply fomentations, or use the warm-bath. This is a safe practice until regular assistance can be obtained.

In the second species, or chronic inflammation, the symptoms come on more slowly, and frequently seem to be excited by some previous disease, which has unsettled the constitution. There is, generally, sickness in the morning, accompanied with vomiting of phlegm and bile, a short dry cough, wandering pain in the belly, variable and fastidious appetite, bound bowels, high coloured urine. Presently the symptoms increase, the fits of sickness are frequent, the appetite may be keen, but the patient, after eating a mouthful

feels filled to the throat. He is breathless, the pulse is quick, the cheeks flushed in the evening, the tongue white or yellowish, and not unfrequently, the eyes are yellow. He does not usually complain of much pain in the right side, but sometimes has an aching pain in the top of the shoulder, and very frequently feels acute pain, like colic, across the upper-part of the belly at night, which then becomes swelled. He sleeps little, the pulse is quick, the skin hot, the stools are at first clay-coloured, or white, and afterwards, perhaps dark, or almost black. The feet swell, and the belly becomes distended, so that the fingers can no longer be pushed below the edge of the ribs. The liver can be felt enlarged, and stretching to the left side, and the patient complains, when pressure is made on it. If relief be not procured, the patient is cut off, either by dropsy or hectic fever, and not unfrequently, before death, is much distressed with palpitation of the heart.

The treatment of this species, consists chiefly in a course of mercurial friction, and keeping the bowels open. Blisters applied over the liver, have little effect ; but in some instances, a seton or pea issue has done good. The diet must be light, and whenever dropsical symptoms appear, diuretics, particularly squills, must be resorted to.

CHAPTER XXIII.

Of Scrophula.

SCROPHULA, depends on a peculiarity of constitution, which can be transmitted from one generation to another. This peculiarity, is not alike strong in all the children of the same family, and it sometimes passes completely over one generation, and appears in the next. In many instances, it is so powerful, as to produce spontaneously, the most distressing effects: in others, it seems to require the co-operation of external injury, or some accidental disease, occasioning debility, and derangement of the constitution, to make it operate.

We cannot discover this peculiarity of constitution, with certainty, until it has produced some morbid effect. But nevertheless we find, that there are some particular habits, or some general appearances, which in-

dicates the existence, to a greater or less degree, of this predisposition. The skin has either a peculiar softness and delicacy, and the complexion is very fine, with light hair, and blue eyes; or the skin has a dull white appearance, the countenance is altogether without colour, and the upper lip is tumid; in these cases, the hair is oftener dark than light. Scrophula appears more frequently, in such habits than in others, but none are exempted.

The effects of this predisposition may appear in any part of the body; but the glands and the joints, are particularly apt to suffer. These effects may manifest themselves in infancy, or not till adult age; but they most frequently are met with, between the third and the seventh year.

The external glands, commonly affected, are those of the neck and throat. In some instances, one alone is swelled, in others, a great many are diseased, forming an extensive cluster. The tumour may be small, or it may increase to the size of a hen's egg, disfiguring the neck very much. The gland swells very slowly, it is not hard, but has a doughy feel, is moveable, and its shape can be distinctly ascertained. It may remain in this indolent state for weeks or months; then, it becomes softer, and may be felt by

its elasticity, or fluctuation, to contain a fluid. Next, the gland inflames, and adheres more firmly to the neighbouring parts ; it has a hard margin, and the top becomes red or purple. Presently, the purple colour extends over the whole surface of the glandular tumour, which, after a considerable length of time, bursts, and discharges a curdy looking matter. The opening slowly enlarges, and thus an ulcer is formed, the surface of which is pale, and the margin tumid, purple, and rather hard ; the discharge is thin, and there is seldom much pain. By and bye, an elevated scab, or crust is formed, which is of a dirty white, or yellow colour. This falls off occasionally, and at length, the part heals below it, and is found to be marked with a smooth purple scar. If there be many tumours in the neck, they may either remain quite distinct, or the redness may spread from the one to the other, and the whole skin becomes purple, and is apt to be excoriated. Scrophulous tumors, sometimes subside, or the ulcers dry up, in the winter, and recur in the spring or summer.

It is not to be expected in this work, that I should enter fully into the method of treating this formidable disease. Many remedies have been proposed, for rectifying the constitution, and curing the ulcers which are

produced. None of these are certain, and few of them do any material good. But, although we have no specific medicine, which can subdue this malady, yet, we may do some good, by enabling the constitution, to resist causes of injury. There are chiefly two directions to be attended to, respecting those children, who are suspected to have a scrophulous constitution. The first is, to use means for invigorating the general system. The second is, to obviate, as much as possible, those causes which excite disease.

The first is to be accomplished, by nourishing and digestible diet, by sedulous attention to the state of the bowels, by comfortable clothing, regular exercise, particularly in the country, and by the use of sea-bathing. It has been supposed by some, that a large proportion of animal food, and the liberal use of wine, were of great advantage, in strengthening the habit. But experience does not shew, that those children, who have an unusual allowance of these articles, are stronger, or more healthy, than those, who are brought up with ordinary care. It is of more benefit, to avoid indigestible food, pastry, sweetmeats, &c. and to pay the utmost attention to the state of the bowels, on which the health, in a great measure depends, and disorders of which very frequently excite disease in the

glandular system. Spending the early part of life in the country, is also a powerful mean, of strengthening the constitution.

The second object, is of great importance also, for every disease, which is long continued, or tends to weaken the system, renders the scrophulous disposition more powerful. Hence we find, that many children have swelling of the glands, and other symptoms of this malady, after fevers, or disorders proceeding from a neglected state of the bowels; and diseases of the skin seem also to have a similar tendency, in proportion to the degree of inflammation attending them, and the general injury they produce. On this account, the small-pox, very frequently, called the scrophulous disposition into action. Local injury, will also have the same effect, for many, evidently have this disease excited, both in the joints, and in the glands, by external violence, and similar causes. These being facts, it follows, that early attention ought to be paid, to every ailment, the constitution, being thus saved, from much derangement.

When swellings have taken place, we have three objects in view. First, to endeavour to dispel the tumour: Second, if this fail, and suppuration take place, to promote the early evacuation of the matter: and Thirdly, to heal the sore which is produced.

• We possess very little power over the tumour by external application. The use of sugar of lead, and discutients, has been attended with little benefit; and perhaps the most effectual practice, though even it is not of great utility, is to rub the tumour gently for a quarter of an hour, three times a day. If the friction give uneasiness, a little olive oil, or camphorated oil may be employed. Mercury in various forms, hemlock, muriate of lime, bark, steel, &c. have been given internally, but seem to have no effect, except in so far, as some of them act as tonics, and improve the health. In this view, the regular use of laxatives, either alone, or combined with some bitter, or tonic, such as myrrh, or steel, will be found useful. Hemlock poultices, &c. have been applied externally, with little benefit.

When it is evident, that matter is forming, suppuration ought to be promoted and hastened, by the application of a bread and milk poultice, and as soon as an abscess is formed, a puncture ought to be made. This is better, than allowing the part to burst of itself, for the aperture is made in a more favourable situation, the consequent sore is less extensive, and the mark is smaller. After some time, the part is to be dressed with resinous ointment, spread very thin.

If the ulcer do not heal soon, it is most usefully managed with stimulant applications. Burned alum may be applied once in the two days, or the part may be bathed with tincture of myrrh, or kept dry with prepared chalk, either alone, or mixed with a small proportion of alum or camphor. If the discharge be great, and the skin extensively inflamed, the application, first of cloths wet with cold water, or sugar of lead-water, and afterwards of chalk, to the parts, to keep them dry, is useful. If the sores be very irritable and painful, a hemlock poultice, sometimes gives relief.

The healing of the sore may also be promoted by the regular use of laxatives, by myrrh, or other tonics, which improve the organs of digestion, and invigorate the system.

Sometimes great and unnecessary alarm is produced, by swelling of glands in the neck, or under the chin, which is not scrophulous. We can trace the complaint to cold, to teething, or absorption of acrid matter from the head or ears, &c. The swelling takes place suddenly, and is sometimes attended, even with a degree of feverishness, especially in infants. It either gradually subsides, or speedily comes forward to suppuration. The best practice, is to give, one or two doses of

physic, and rub the gland with anodyne balsam, three times a day. If it inflame, it is to be poulticed, and whenever much matter is formed, a puncture is to be early made, and the part afterwards dressed with simple ointment. The mark presently disappears.

If the gland remain stationary, especially in grown up children, I have found it of great service, to give every morning, a large glass of water, containing two drams of epsom salts.

Besides the glandular affection, produced by scrophula, many other parts may suffer, such as the eyes, or eye-lids, the skin, the spine, the joints, &c. To describe these various complaints, would not only lead me into a very extensive field, but would also be unnecessary in a work of this nature. I may only remark, that the earliest attention, ought to be paid, to pain or swelling of any of the joints, by which, much and lasting mischief may often be avoided.

PART FOURTH.

OF DISEASES OF GROWN-UP
WOMEN.

CHAPTER I.

Of the Monthly Evacuation.

HAVING finished the remarks, I had to make, on the diseases of children, I am now led to notice, some complaints incident to grown-up women, but which could not be introduced into the former parts of this work, as some of them do not occur in the pregnant, or child-bed condition.

The age, at which the monthly evacuation commences, varies not only in different climates, but also in different individuals, in the same place. In this country, it usually appears about the fourteenth year, and continues for a period of thirty years.

In some instances, this change takes place, without any previous indisposition, or uneasy feelings. But in general, it is preceded for

some time, by various affections of the stomach and bowels, listlessness, diminished appetite, costiveness, bilious vomiting, and pain in the back, or lower part of the belly. The health seems to decline, and not unfrequently, a train of nervous, or hysterical symptoms occur. The evacuation then takes place in a sparing and imperfect degree, but in some time, it returns in greater perfection, and the general health improves. Many women have no farther inconvenience; but some, previous to, and along with every evacuation, have a renewal of the pain, sickness, bilious vomiting, and other distressing symptoms, and are apt to have spasmodic affections of the bowels, or difficulty of breathing.

In every instance, the female system is peculiarly irritable at the monthly period, and more disposed to nervous affections. There is also a greater activity of the vessels at that time. On this account, we observe, that tumours grow faster, and those who are liable to inflammation of the eyes, or of any part of the skin, have that increased more, at this period, than at other times. Some pains are increased, others are relieved, by the evacuation; and many women, before it takes place, have an eruption, like nettle-rush, on the skin.

With regard to the management of the

constitution of young women, about the time when this evacuation commences, I must observe, that in almost every instance, where the health suffers, and the evacuation is long of appearing, or even, when the usual age has not passed, the symptoms arise, principally, from weakness of the whole system, or of particular organs. When we have merely a declining, or delicate state of health, with a variable condition of the stomach and bowels, the case is pretty clear. The most effectual means of giving relief are, keeping the surface of the body warm, by means of a flannel shift and drawers, the use of the warm-bath, every second night, particularly, the warm sea water bath, moderate but regular exercise, digestible diet, and above all, preserving the bowels correct, by using daily, if required, one, two, or three, of compound rhubarb pills, or two tea-spoonfuls of epsom salts, and three grains of sulphate of iron, dissolved in a large tumbler of water, which is to be drank every morning before breakfast. It will also be useful to employ tonic medicines, such as tincture of steel, or carbonate of iron, alone, or combined with myrrh.

If, besides a delicacy of constitution, there be symptoms, indicating an affection of particular organs, such as cough, palpitation, or pain in the side, it will be necessary to have

early recourse to a practitioner. The symptoms are alarming, from their resemblance to the incipient stage of consumption. Even great attention, and much experience, cannot always ascertain the distinction; nor must it be forgotten, that if due means are not used, many recoverable cases, will end in actual disease of the lungs. The distinction is to be made, by a careful comparison of the symptoms of the two diseases, and by observing, that in the bad health, connected entirely with the time of life, the cough has more of the appearance of being nervous, it comes on in distinct fits, at particular times, it is attended with no permanent difficulty of breathing, and there is no bad expectoration. Palpitation, and many hysterical symptoms, accompany this, and we have, besides, a feeling of fulness and irritation in the uterine region, and uneasiness in the back. In a case, however, of so great importance, and so apt under neglect, to end in actual disease of the lungs, no time ought to be lost, in obtaining the best advice. In the state of bad health, I am at present describing, the mean of cure, consists principally in the invigorating plan. If unfortunately, it be supposed, in such a case, that the symptoms proceed from inflammation of the lungs, or from some complaint, requiring the use of the lancet, the loss of blood is

always productive of additional weakness, and increases the danger of the patient. Myrrh, combined with oxyde of zinc, is a medicine of considerable utility, as a tonic, and if given in a proper dose, it does not sicken. Four grains of the former, and one of the latter, will be sufficient to begin with, and this, with the addition of a little cinnamon, may be taken three times a day. The bowels are to be kept open, by the compound rhubarb pill. The diet must be light, and it is of great service, to remove the patient to the country, and use exercise on horseback. Sleep is procured at night, if necessary, by hyocyamus, or laudanum. Pain in the side is relieved, by the application of a warm plaster. The occasional use of the tepid bath, is pleasant and beneficial, especially, if the skin be dry and warm. As the health improves, the cold bath may become useful, but it is seldom so at first, as it produces languor and chilness, or headach. When it does good, the patient feels a glow of heat after it, and a greater degree of liveliness.

It has been proposed, to employ different medicines, in order to promote the appearance of the evacuation. But these have seldom any good effect, and in some instances, do harm. The effectual remedy, is to give the constitution vigour, and to increase the

general health, without which, no medicine can have any effect, and which, if accomplished, will of itself, produce the desired change.

In some rare instances, the evacuation is prevented from appearing, by mechanical obstruction, which is in general, very easily removed, by a trifling operation.

Fortunately, in most cases, the evacuation takes place in due time, and the constitution sustains no material, or permanent injury. It is however, in every instance, proper to pay particular attention to the system, during the continuance of the evacuation. For, either by imprudence in diet, or by exposure to cold, pain in the bowels, hysterical affections, or sudden obstruction of the discharge, may occur. It is the practice with some, to take every night warm drinks, containing, not unfrequently, the addition of spirits. This is both unnecessary, and prejudicial. It is unnecessary, because nature is certainly capable of conducting all her operations in health, without aid; and it is prejudicial, in as far as the stimulating ingredients may increase the discharge beyond due bounds. I do not however, from this remark, mean to say, that a single glass of warm toddy is improper, especially, if there be uneasiness in the bowels. But, I have uniformly observed, that those

who attended least to this practice, enjoyed the best health.

The stomach and bowels, are at this period, very easily disordered, and therefore, every thing which is heavy or indigestible, ought to be avoided. Some are hurt by eating fruit, or vegetables, others by taking wine, or any fermented liquor. In this respect, experience must enable each individual, to judge for herself. Exposure to cold, particularly getting the feet wet, is hurtful, as it tends suddenly to obstruct the discharge. The same effect is likewise produced by violent passions of the mind, which are also at this time, peculiarly apt to excite spasmodic affections, or hysterical fits.

It is a general, and very proper rule, not to administer any very active medicines, at this time, unless some violent symptom absolutely require them. Opiates for instance, are in many cases, necessary to allay spasmodic affections, or abate pain, and they are in such circumstances, uniformly safe. They give speedy relief, to hysterical feeling of suffocation, or to spasm of the stomach or bowels. Blood-letting is also, in some instances, necessary, from particular circumstances, at this period, and in such cases, it is safe, and does not obstruct the evacuation.

Dancing, exposure to much heat, or mak-

ing any great or fatiguing exertion, are improper. These causes may increase, to an improper degree, the quantity of the evacuation, and in certain circumstances, may give a disposition to a falling down of the womb.

To conclude, the period or time of life, when the monthly evacuation should disappear altogether, is considered as critical. It is really so in two cases. The first is, when the woman has suffered considerably at each period, from sickness, pain, and disorder of the bowels. Such women, not unfrequently, when the constitution is freed from this monthly change, enjoy better health than formerly. The second is, when there is a tendency to disease, in some particular organ, especially in the womb itself, in some of the abdominal viscera, or in one of the breasts. In such cases, the time of life may prove the period, at which the disease begins to make progress.

The time, at which this evacuations ceases, varies from the forty-fourth to the fiftieth year. It is usual, for some time before it disappear, that it should become irregular. It not only is sometimes greatly less, and again, much more in quantity than usual, but it also is occasionally obstructed for some weeks, and then perhaps, comes oftener than it ought to do. The occasional obstruction, before the

final cessation of the discharge, is frequently accompanied with sickness, and swelling of the belly, from wind in the bowels. These circumstances, sometimes incline married women, for some weeks, to consider themselves with child.

To prescribe medicines, with a view of prolonging the evacuation, beyond the period allotted by nature, is not more rational, and certainly would not be more successful, than the attempts of the alchymist, to extend the term of human life, by an elixir. But although, in this view, few take medicine, yet many are disposed to use remedies, to prevent the supposed injurious effect, of the cessation of the evacuation. These, are in general unnecessary, and it ought to be a rule, not to take medicine, unless some particular condition require it. The bowels are to be kept regular, but it is not necessary to take smart purges, unless there be evident marks of fullness of blood; in which case, exercise, and purgatives will be proper. Any disposition which particular organs, may have to disease, at this time, must be checked, by appropriate remedies, which, depending on the nature of the affection, for which they are prescribed, cannot here be pointed out.

CHAPTER II.

Of Painful Menstruation.

IN some instances, menstruation is attended with great pain in the back, thighs, and lower part of the belly. This state is sometimes accompanied, with suppression of urine, or violent colic pain, and spasms of the stomach. The discharge generally takes place slowly, and is sparing in quantity, and occasionally, portions of skinny looking substance come away, which may impose on the patient, if she be married, and make her suppose, that she has had a miscarriage.

The pain, and other symptoms, appear to depend, on an imperfection of the menstrual action. They may also, though much more rarely, attend a profuse discharge.

Relief may be obtained from the pain, by the early application, of warm fomentations

to the back and belly, or by sitting down, for a quarter of an hour, in a tub of warm water. After this, the back, and lower part of the belly, ought to be well rubbed with anodyne balsam, and if the pain continue, a clyster, composed of a cupful of thin starch, and a tea-spoonful of laudanum, is to be administered. If these means have not the desired effect, it will be proper to give, five grains of Dover's powder, every hour, for four or five times, or till a gentle, but general perspiration be induced. This is also to be encouraged, by drinking frequently, a little saffron-tea, or warm water, with the addition of a little ginger wine. If there be pain about the loins, and difficulty of making water, a tea-spoonful of sweet spirit of nitre, in a small cupful of warm juniper-tea, may be taken every two hours, till relief be obtained. Spasm, or pain in the upper part of the belly, may be removed by thirty drops of laudanum, and a tea-spoonful of aromatic spirit of hartshorn, in half a glass of peppermint water.

In order to prevent this painful state, in those who are subject to it, we may, with advantage, employ the warm-bath, for three or four nights, preceding the menstrual period, and give on going to bed, ten grains of Dover's powder. The bowels are to be kept uniformly regular, by means of a preparation

of aloes *. Exposure to cold, especially near the time of the appearance of the discharge, is to be carefully avoided. The constitution is to be improved, and strengthened by such means, as its particular condition requires, and in general, by the use of steel, and the shower or sea-bath, provided, these do not produce languor and headach, or pain in the back.

* Take of aloes one dram ; of ipecacuanha twenty grains ; of oil of peppermint, ten drops ; of extract of cicuta, a sufficient quantity, to form a mass, which is to be divided into twenty pills. Of these, from one to three may be taken at night, as often as is necessary.

CHAPTER III.

Of Obstruction.

FROM strong emotions and passions of the mind, or from sudden exposure to cold, during the menstrual period, the discharge may be speedily checked. This interruption is usually attended with very considerable pain in the back, bowels, or stomach, and sometimes in the chest. In some instances, these symptoms are accompanied with much sickness, and inclination to vomit; in other cases, with hot skin, and frequency of pulse. In almost every instance, it is proper to have immediate recourse to fomentations, or the warm-bath. It will also be generally useful, to put the patient to bed, and give half a glassful of saline julap, every half hour, with the addition of five drops of laudanum, and twenty of ipecacuanha-wine. This dose may be repeated,

until a gentle perspiration come out, and the pain abate, or until, at least, sixty drops of laudanum have been taken. When there is much fever, or violent pain in the chest or head, or discharge of blood from other organs, as for instance, the stomach or lungs, it may be necessary to have recourse to the lancet.

Many women have the evacuation postponed, for a week or two, beyond the usual time, or miss one or two periods without any very evident cause, and without inconvenience. But a continued obstruction, is usually attended by bad health, or by some disagreeable, or troublesome symptoms. It is the general opinion of women, that all these effects proceed entirely from the obstruction, and that if it were removed, they would be well. This is doubtless, in some instances correct, but in many it is not; for the obstruction, may be merely the consequence of weakness of the constitution, and may have no effect in producing the other symptoms.

Obstruction, when it does not proceed from previous bad health, and debility of the system, is generally of itself, productive of troublesome consequences. It may be caused by the application of cold, or by frights, or passion, during the flow of the evacuation, as I have already noticed; and the obstruction

being thus once occasioned, may continue for a length of time. It is likewise, sometimes caused by costiveness, or a disordered state of the bowels.

Obstruction so produced, is accompanied with symptoms of indigestion, frequently with sickness, especially in the morning, variable appetite, heart-burn, inflation of the bowels, palpitation, distressing headach, swelling of the legs, bilious vomiting, and many hysterical symptoms. It is also, sometimes, attended by vomiting, or spitting of blood, eruptions, ophthalmia, &c.

Such is the general train of symptoms, but they will be somewhat modified, by the constitution of the patient. Those, who are of a full habit, or robust frame, are generally flushed in the face, have flying pains in the chest, perhaps spitting of blood, the pulse is usually somewhat frequent, and there is even a degree of fever, giddiness, flushed face, cough, palpitation, difficulty of breathing, and a complication of nervous affections. The bowels are generally bound.

Those who are of an opposite habit, and especially those, who have suffered severely from miscarriage, difficult labour, or other debilitating causes, have different symptoms, constituting, what has been called chlorosis. The face is pale, the eye sunk, and the under

eye-lid livid. The bowels are costive, the pulse small, and sometimes frequent, or irregular, and subject to sudden variations in frequency and strength. The tongue is furred. The feet are sometimes swelled, and the belly tumid. The appetite is diminished, or there is a craving for chalk or indigestible food. The sleep is generally disturbed, though sometimes, the patient is unusually drowsy. There is much wind in the stomach and bowels; palpitation, and a timid state of mind. Often there is cough, and nocturnal perspiration, which gives rise to an apprehension, that the patient is consumptive, and indeed, the diagnosis is often very difficult to make. But in this disease, the marks of pulmonic affection are less distinct, and the cough comes in fits; it is often worst in the morning, and is not increased by lying on one side, rather than another; neither is there any pain, or strong excitement to cough, on making a long inspiration.

When obstruction occurs, in either of the states I have mentioned, prompt means must be employed for removing it, as the health may suffer materially. In the first case, fatal disease in the lungs, or stomach, or liver, may be induced. In the second, consumption, or dropsy, may be the consequence.

In the first case, it will be of benefit, to

prescribe a course of aperient medicines, particularly, mineral waters. But these are not to be carried to an undue degree, nor persisted in, when they occasion debility. Two tea-spoonfuls of epsom salts, in a tumbler of water, may be taken every morning, for a considerable time. The diet ought to be rather sparing; and, if there be marked symptoms of plethora, that is, fulness of blood, or much shooting pain in the chest, oppression in breathing, or headach, the lancet must be employed. Should the skin, notwithstanding these means, remain hot and dry, the saline julap will be useful. Moderate exercise must be taken; but the cold bath, in the early stage, and always, until the fulness be diminished, is hurtful, and productive of headach, or pain in the breast. The febrile symptoms, and plethora, being removed by laxatives, it will be of great benefit, to begin a course of strengthening powders, each of which, may consist of five grains of myrrh, three of carbonated precipitate of iron, and six of supercarbonate of soda, with a little cinnamon, or ginger, in addition; one may be taken three times a day. Emmenagogues, or forcing medicines, are not to be employed at first, but if these powders be not effectual, rather less than a tea-spoonful, of tincture of

black hellebore, may be taken morning and evening, in a little water.

In the other, or chlorotic species of obstruction, the treatment is much the same, as that recommended in the first chapter, for the management of those who are long of having this evacuation. We are to employ, the warm salt-water bath, succeeded by friction over the body, with warm flannel, or the flesh brush. The bowels are to be kept regular, which is a point of great importance, and if the stools be offensive, it may even be necessary to give pretty powerful and repeated purgatives. Chalybeate medicines are of great efficacy, and presently we may employ along with these, five grains of powdered sa-vine, three times a day, in a desert spoonful of tincture of myrrh. The use of the Bath waters, is also of benefit. The diet is to be as nourishing as the patient can take, and such a quantity of wine, particularly Madeira, may be taken, as does not produce heat, or flushing. Previous to the expected time, when the evacuation should appear, it will be useful for one or two nights, to use the bath pretty hot; sometimes, an emetic taken the night before, has been of great benefit. Besides the remedies I have ordered, many others may in particular cases be requir-

ed, such as mustard seed, madder, rue, sage, &c.

When the strength increases, and the constitution becomes more vigorous, the cold bath, when it does not disagree, always does good, and confirms the health.

In obstinate cases, a change of climate will be useful, and in every instance, a removal from the town to the country, is of advantage: Riding on horseback is highly proper.

In those instances, where the evacuation has become suppressed, in consequence of previous bad health, it is evident, that no attempt to restore it, can be either effectual or useful, till the cause be removed. Means must be employed, for rectifying the state of the constitution, when this can be done. Some have obstruction caused, by very slight weakness, or very early in chronic diseases; others continue regular, till even the last stage of consumption.

In those cases, where obstruction in married women, continues for several months without injuring the health, it is necessary, before using remedies, to consider, whether there is not reason to suppose, that they are with child, and the signs by which this state may be known, have formerly been noticed. It is also possible, that the obstruction may proceed from a false conception. In some

instances, however, an obstruction may, in young and healthy women continue for a great many months, without either of these causes, and without any inconvenience. This is chiefly the case, in those who are very corpulent, or who have been in the pernicious practice of employing vinegar, and strong purges, to reduce their size. By the regular use of exercise, rising early in the morning, avoiding supper, keeping the bowels correct, and living, upon the whole, rather sparingly, the health will be preserved, and in course of time, the desired alteration will take place. This plan, at any rate, prudently conducted, never can do harm, whereas, extreme abstinence, and repeated evacuations, by purgatives or other means, may be productive of the most lamentable consequences. Amongst other evils, we too often find, that the organs of digestion become impaired, and the patient flies to laudanum or ardent spirits for relief. Each dose calls for another, until at length, some fatal disease is induced; and in the last stage of weakness, when it is too late to profit by a change of conduct, the sufferer with unavailing sorrow, deplores her error. Continual vomiting, repeated pain in the bowels, innumerable hysterical symptoms, diseased liver, or dropsy, are some of the evils en-

gendered by indulgences in the use of narcotics, a craving for which, is too often excited by that system, which I have reprobated, which even, although it produce not this, may cause other serious evils, and which being considered in itself as innocent and commendable, is apt to be pursued with avidity, by those who know not the danger to which it leads.

CHAPTER IV.

Of Increased, or Profuse Discharge.

THE menstrual evacuation may be excessive in quantity, and may also recur too frequently, as for instance, once in the fortnight, or three weeks. Some, have naturally, a much more copious discharge than others, and in these cases, although, at particular times, the quantity may be increased, the

appearance is the same. But, in every instance, where the discharge is very profuse, or greatly increased beyond the natural quantity, its nature is to a certain degree changed, and clots of blood, or numerous shreds of lymphatic substance, often like part of a miscarriage, are met with. There is also, usually, considerable pain, both in the back, and lower part of the belly.

Profuse discharge, may occur under two different states of constitution. In the one, the woman is robust, of a full habit, and often of a ruddy countenance. In the other, she is pale, delicate, frequently of a slender make, and easily fatigued.

Married women chiefly, are subject to profuse discharges; the unmarried, unless well up in years, though they may have occasionally, a considerable evacuation, seldom have an excessive discharge, except in those cases, where some debilitating disease, such as fever, occurs about the menstrual period.

The effects of profuse discharge vary, according to its degree. Where it is frequently repeated, but not in excessive quantity, the health suffers slowly, the face becomes pale, the strength impaired, the appetite diminished, the digestion is injured, palpitation, and many nervous complaints are induced, the head aches, the back is weak and painful,

the feet swell, and if the complaint continue long, the constitution may be irreparably damaged. If it take place suddenly, to an excessive degree, the strength is speedily exhausted, the patient feels cold and sick, the pulse is weak, and perhaps fluttering, the face pale, the lips pallid, the breathing oppressed, the extremities become cold, and if the discharge continue, vomiting and fainting, or perhaps hysterical fits, are excited, or death itself, may be the consequence.

A variety of causes may produce this troublesome disease. Some of these are general, such as a state of great weakness, or of too much blood ; others are local, such as debility of the uterus, occasioned by tedious labour, or frequent miscarriages.

A sedentary life, indulgence in warm drinks, too much sleep in a heated room, or with many bed-cloathes, irregularities of diet, fatigue, or strong passions of the mind at the menstrual period, &c. will act as exciting causes, especially in those conditions which I have noticed, as predisposing to the disease.

A diseased state of the womb itself, particularly at an advanced period of life, gives rise to obstinate, and repeated discharges of blood. This situation is to be suspected, where there is constant pain in the back, a feeling of heaviness, or pain in the lower part

of the belly, and frequent evacuations of clotted and fluid blood, in the intervals, between which, there is a discharge of brown, yellow, or green, ill smelled matter.

In the treatment of this disease, we have two objects, first to moderate the discharge, and procure present security; and second, to prevent a return.

The first thing to be done, when the discharge is excessive, is to put the patient to bed, and keep her cool, for heat excites the circulation; she is to have few bed-cloathes, the windows, if it be summer, are to be opened, and cloths dipped in cold water, are to be applied to the back, and lower part of the belly. The food is to be light and cool, such as panado, stewed apples, &c. The drink is to be cold and sparing, the thirst being rather quenched with ripe fruit, such as oranges, currants, goose-berries, or grapes. Port-wine is generally given as a cordial and astringent, but unless, in cases of great debility, where the strength is much impaired, it does harm by increasing the circulation.

This is the general plan of treatment, but it must be varied in degree, according to circumstances. In those cases, where the patient is robust, plethoric and ruddy, it must be carried pretty far. The cloths wet with cold water, are to be applied frequently, or

changed often, the bed-cloathes must be exceedingly thin, and nothing but a little dry biscuit, and cold lemonade allowed. It may even be necessary, in order quickly to diminish the force of the circulation, to take away some blood from a vein. On the contrary, when the constitution has been feeble, and the patient delicate, or when the discharge has continued for a considerable time, and she feels cold and exhausted, or faintish, we must not push the cooling plan so far. We are not to carry it the length, of producing much or prolonged shivering. Nay, if the extremities be cold, it may even be necessary, in order to preserve the heat, to apply warm flannel to the feet.

With regard to the farther treatment, and the use of internal medicines, I must observe, that we have in this disease two objects, during the continuance of the discharge; the first is, to abate it, the second is to obviate its effects. In order to abate it, astringents, such as kino, alum, port-wine, &c. have been employed. Some of these do harm, and most of them very little good. If the strength be not much impaired, and the discharge have not continued long, it will be sufficient to give fifteen drops of elixir of vitriol, in a glass of cold water every hour, and in summer, the water may be cooled with ice. A few grains

of alum, dissolved in cold water, may also be employed in place of the elixir. Port-wine, with plethoric patients, always increases the discharge, instead of diminishing it; but when the strength is impaired, and the vessels weak, it may then, not merely do good as a cordial, but may also check the discharge, which continues from debility.

If the discharge be obstinate, it will be proper to press a cloth, very firmly into the passage to the womb, by which the blood is retained, and coagulates in the mouths of the vessels, stopping them up. Under these circumstances, opiates will be useful, as they, when given in a full dose, not only check the discharge, but also preserve the strength, and abate nervous irritation. If there be a tendency to faint, or the strength be much exhausted, we not only give a pretty large dose, forty, fifty, or sixty drops of laudanum, or from two to four grains of opium, according to the urgency of the case, but we also give at stated intervals, wine, cinnamon-water, aromatic spirit of hartshorn, or other cordials. We must also support the strength, by giving repeatedly, but in small quantity, beef-tea, calves-feet-jelly, &c. Vomiting is best restrained by opium, in the form of pills.

Ipecacuanha, digitalis, and some other remedies have been recommended, and in cer-

tain cases may be necessary. But these, cannot with advantage, be committed to the management of the patient, or her nurse. It will therefore be sufficient to say, that in all extreme cases, the best practice, until assistance be procured, is to press firmly with a cloth on the passage to the womb, in order to restrain the discharge, and give an opiate, or small quantities of wine, according to the circumstances of the case, which may be judged of, from the preceding remarks.

All increased discharges do not require this care. In moderate degrees, it is sufficient, that the patient recline on a sofa, keep cool, and avoid the use of stimulating or heating substances.

Our second object is, to prevent a return of the attack, in those who are subject to it. This is to be accomplished, only by considering the causes, which occasion or promote it. Where we find the patient of a full habit, it will be proper to reduce the quantity of blood, by the use of purgative medicines, such as a solution of Cheltenham salts, by regular, but prudent exercise, by employing a considerable proportion of vegetables in the diet, and by abridging the quantity of sleep. It will also be necessary, to avoid all stimulants. When by these means, the plethora is removed, the shower bath will be useful to

strengthen the vessels, which have been over-distended. In a greater number of cases, however, we meet with a delicate constitution, and spare habit, with pale countenance. This state requires, the use of sea-bathing, or the shower-bath, and the vessels of the womb are particularly strengthened, by pouring cold water daily, on the back and loins. Strengthening medicines are useful, such as tincture of steel, or chalybeate waters, such as that of Tunbridge. The bowels are to be kept regular, by some gentle laxative, such as a small quantity of Cheltenham salt. The diet should be nourishing, and a proper proportion of wine is to be prescribed. Regular and invigorating exercise must be taken; whilst on the other hand, fatigue, and especially exposure to relaxing heat, and the use of warm tea, must be avoided. In all cases of repeated discharge, especially, if it continue almost constant, it is of signal benefit, to inject twice or three times a day, a saturated solution of alum, in order to constringe and strengthen the vessels of the womb. In obstinate cases, the occasional exhibition of a gentle emetic, has been of service.

When there is reason to suppose, that the discharge is dependent on, or connected with, a diseased state of the womb itself, such as

schirrus, or polypus, means must be employed for removing, or, where that cannot be done, abating the diseased condition.

CHAPTER V.

Of Fluor Albus.

THE inner surface of the womb, and of the passage to it, is at all times covered with a small quantity of mucus, which is furnished by glands and vessels, destined for that purpose. In many cases, however, this mucus is greatly increased in quantity, and is also altered in quality, forming a discharge, commonly called the whites. This may come from the passage to the womb alone, or from the cavity of the womb, or from both. In slight degrees, it is attended with very little inconvenience, but when the alteration is more extensive, the concomitant symptoms vary, from slight pain and weakness in the back, to universal, and considerable debility, with

much derangement of the stomach and bowels, and also of the nervous system.

The appearance of the discharge varies in different cases. In the mildest form, it is slimy, and much the same with white of egg, having very little colour or smell. In the next degree, it is of a yellowish colour, but the colour is not very deep, and the discharge is not offensive. In a greater degree of derangement, the colour is inclined to green, and the discharge is slightly offensive, and somewhat irritating. In the worst form, it has more resemblance to purulent matter, is ill-smelled, and frequently mixed with blood. This form often is dependant on a serious disease of the womb itself.

The simplest and slightest species is not attended with pain in the back, or at least, it is very trifling. The health is not much affected, the strength scarcely diminished, though the back is rather weaker than usual. The menstrual discharge is not interrupted, nor rendered irregular. In the next degree, the back is constantly weak, and after any exertion, aches considerably, the power of digestion is diminished, and the bowels are generally costive, the menstrual discharge, however continues pretty regular. There is sometimes a feeling of heat and itching, about the passage to the womb, particularly,

if the patient be plethoric. In a greater degree of this complaint, the back is constantly painful, and very weak, and there is a feeling of much weight or relaxation, about the lower part of the belly, and top of the thighs. The menstrual discharge is either obstructed, or rendered irregular, or profuse. The stomach is much impaired in its vigour, the patient is costive, troubled with flatulence, want of appetite, or heart-burn, the face pale, and unhealthy; palpitation, and many hysterical affections take place, and the constitution seems altogether, to be very much debilitated. This state is always productive of sterility. In the worst species, where the womb is diseased, the pain is usually greater in the lower part of the belly, the discharge is mixed with blood, and careful examination discovers the exact state of the womb.

The quantity of the discharge is variable. In some cases, it is very little; in others, profuse. In some, it continues pretty uniform, in others, it increases and diminishes, or may altogether disappear for a day or two, or even for a longer period. When the menstrual discharge continues, it is not unusual for the fluor albus, to be increased for a little before and after the monthly period, or if the menstrual discharge be obstructed, the fluor may be in greater quantity about the regular pe-

riod, and is in that case, attended with additional pain in the back. When the discharge takes place from the womb alone, and not from the passage, it is sometimes interrupted for a day previous to menstruation, and if the patient conceive, it immediately stops. On the other hand, the discharge from the passage alone, is often increased during pregnancy, and in some instances, takes place only at that time.

This disease may be produced by any cause, which either weakens or irritates the womb and its appendages. It may arise from general debility of the constitution, or from torpor of the bowels, but it is especially caused by circumstances, impairing the power of the womb itself, as for instance a severe labour, a miscarriage, particularly, if the patient get too soon up, and mismanage herself, or profuse menstruation, or much fatigue, or exposure to cold at the menstrual period, or perhaps, at any time, in the same way, as discharge is produced by cold, from the mucus membrane of the nostrils, or wind-pipe. It is also produced by irritation, such as worms in the bowels, or by pregnancy, or affections of the womb itself. In some cases it appears to depend on a full and irritable habit of body.

A great variety of remedies have been employed for the cure of this complaint, such as

balsams, and resinous preparations, mercury, electricity, &c. &c. Of these, I am not able to give a favourable report, having seldom seen any benefit from their exhibition.

In the treatment of this complaint, regard must be had to the apparent cause, and to the state of the constitution. If the habit be full, and the constitution disposed to fever, from slight causes, and if in these circumstances, there be a sense of heat about the passage to the womb, it will not be safe to stop the discharge by local applications. The proper treatment consists in the use of cooling laxatives, and spare diet. Neither is it proper to check this discharge, when it occurs as an early symptom of pregnancy, but if it increase to a troublesome degree, it may afterwards be moderated by mild astringent applications. In the great majority of cases, however, the complaint is dependent on weakness of the uterus, and perhaps, of the constitution, and the most useful remedies are those which invigorate, such as the cold bath, infusion of bark, preparations of iron, and due attention to the state of the bowels, and to the regulation of the diet, which ought to be nourishing, but light. These means, strike at the cause of the complaint, but if they do not remove the effect very soon, we are not to trust to them alone. For when once a

morbid secretion is excited, it is very apt to continue, although the exciting cause cease to operate. On this account, we ought very early, where there is no fulness of the general system, nor any affection of the womb itself, to have recourse to the use of an astringent injection, which is to be thrown into the passages, by means of a proper syringe, three or four times a day. The best remedy of this nature, is a solution of alum in water. Half an ounce of the former, may be added to a quart bottle of the latter. After many trials, I have satisfied myself, that although assistance may be derived, as I have mentioned, from internal medicines, and the cold bath, yet the chief dependence is to be placed on astringent applications to the seat of the discharge; and these, with the exceptions I have pointed out, are perfectly safe in all cases, and seldom fail in producing a cure. I need scarcely repeat, that when there are symptoms of disease in the womb, which the practitioner will of course satisfy himself respecting, they are inadmissible or useless.

When fluor albus proceeds from worms, purgatives and bitter clysters, are the proper remedies.

Aching pain in the back, is often mitigated, by the application of a large adhesive plaster, spread upon soft leather.

CHAPTER VI.

Of Diseases of the Womb.

SECTION I.

I HAVE formerly noticed bearing down of the womb, and therefore, need not here make any observation on that subject. There is however, a complaint, which is sometimes, at first mistaken for it, and which may occur at any period of life. I allude to the polypus in the womb, which is a firm tumour, attached to some part of the cavity of that organ. The mild polypus, is connected to the womb generally by a narrow neck. It is, at first at least, smooth, and grows slowly. As it grows, it of course makes the womb enlarge, and presently its mouth dilates, so that the polypus can be felt with the finger. Then it gradually descends into the passage, or in some instances, is forced down, with pains like those

of labour. It cannot however, come away, like a false conception, because it is still adhering firmly to the womb itself, but it remains in the passage, and if it be very large, fills it up so completely, as sometimes to obstruct the discharge of the urine.

The symptoms at first produced, are often pretty much the same with those, occasioned by the bearing down of the womb. There are aching pain and weakness in the back, uneasiness in the lower part of the belly, and a sensation of dragging about the groins. The belly is swelled, but the size is changeable. There is usually a discharge like fluor albus, which is sometimes foetid, and the health is more or less impaired. The appetite is diminished, the digestion bad, and many hysterical symptoms are occasioned. Presently, repeated discharges of blood take place, sometimes to an excessive degree, and the health becomes greatly injured. Even although little or no blood be lost, the constitution suffers. The patient is soon tired, can undergo very little fatigue, and complains much of a bearing down or heaviness. The pulse becomes quick, and at length hectic fever may be excited, which proves fatal. No evident cause can generally be assigned for the appearance of a polypus.

This disease, in many of its symptoms, bears a strong resemblance to a falling down of the womb, and in others, resembles a more dreadful disease, an incipient cancer. It can only be certainly discovered, by accurate examination, which never ought to be neglected.

No medicines have any power over this tumour, but it may be safely and successfully removed, by the application of a ligature round its neck. This operation gives no pain, and is practicable, whenever the mouth of the womb has dilated completely. But, if the symptoms be not urgent, it will be better to delay, until the polypus have wholly, or in part, descended into the passage, as the ligature can then be still more easily and successfully applied.

SECTION II.

THERE is a tumour of a different kind, met with in the uterus, which does not spring from the surface of its cavity, but is imbedded in its substance. It forms a knob or projection, which gradually increases, and in some instances, several of these form in succession, and the womb becomes considerably enlarged. This tumour is called a tubercle, but it

cannot be of any advantage, to be more particular, in describing its appearance or structure. It produces, very nearly, the same symptoms with a polypus. It also frequently occasions a repeated discharge of blood, with shreds of skinny looking substance, which may pass for a conception. The distinction between this disease and a polypus, can only be made by a skilful examination, which determines the point. It is always proper to attempt the cure of this early; for, if neglected, it not only produces bad health, but may also eventually prove fatal, by the irritation it gives. It is not, however, in general, to be considered as a mortal disease; nay, in some cases, where it has been discovered after death, it appears to have given very little distress during life. The growth may frequently be checked, and in several cases, its size may even be diminished very greatly, by the regular use of laxatives. One of the best, perhaps, is the sal polychrest, from two to three drams of which, may, for a length of time, be taken early every morning, in a large glass of water. Should this not be sufficient, its operation may be assisted, by taking at night, an aloetic pill. Much relief is also obtained to the uneasy feelings, and even some advantage over the tumour itself, by the use, of the warm sea-water-bath, every night. The diet

must be light, and rather sparing. Wine and stimulants are to be avoided. The possibility of removing this complaint, or of keeping it in subjection by proper remedies, and the great probability of curing completely a polypus, by a simple operation, or of relieving, by a mechanical contrivance, a bearing down of the womb, must surely be powerful inducements for women, labouring under symptoms of these complaints, to submit early to a skilful examination, which can alone determine the precise nature of their disease.

SECTION III.

A MORE formidable, and dreadful disease, is scirrhus, or an induration, and generally an enlargement, of some part of the womb, ending in cancerous ulceration. This begins with heat, and itching, about the passage to the womb, with darting pain in the lower part of the belly, and aching of the back. There is a dull pain felt at the top of the thigh, attended with a disagreeable bearing-down sensation. Along with these symptoms, or even sometimes before they appear, or at least, are much attended to, there is a discharge of whitish fluid, as in fluor albus, and sometimes discharges of blood, which pass

for profuse menstruation. Presently, stinging pain is felt, shooting from the lower part of the belly, to the back, accompanied frequently with pain or difficulty in voiding urine. Then the pain becomes more fixed in the situation of the womb, and is of a glowing, or gnawing nature. The countenance very early becomes sallow and unhealthy, the patient is troubled with flatulence, indigestion, vomiting, and pain in the bowels. After some time, the pulse becomes quick, the discharge increases from the womb, becomes foetid, and often mixed with blood; or repeated, and sometimes very profuse, discharges of blood take place. In some cases, the ulceration extends to the bladder, or to the bowel, and either urine or the stools come away with the bloody matter. In other instances, the tumour becomes firmly fixed in the pelvis, and by its size obstructs the passage of either the urine or stools, or both. The appetite is quite lost, the weakness increases, the mind wanders, and at length, the patient is relieved by death, from her mortal sufferings.

Such is the general progress of cancer, but there must, in different cases, be many modifications of the symptoms, according to the size and situation of the tumour, the state of the constitution, and other circumstances.

Death may take place, before ulceration be produced, and when there have been very few attacks of bleeding, and even little fluor albus. The strength gradually sinks, though there is perhaps, very little pain, and scarcely any fever, the pulse having, during the course of the complaint, been regular and unaffected. Three or four days before death, it becomes quicker, fuller, and irregular. Slight delirium occurs, or she refuses all food, lies for some time in a drowsy state, and suddenly the pulse becoming weak and fluttering, she dies somewhat unexpectedly. If, on the other hand, the disease be protracted, till much ulceration take place, there is greater suffering, very offensive discharge, profuse and repeated bleedings, constant pain, restless nights, extreme weakness, aphthous state of the throat; and a cold clammy perspiration, precedes the insensibility, which terminates the span of life.

This disease, most frequently, appears about the time, when the menstrual evacuation ceases, but no age is exempted from it. The causes which induce it, are obscure, and can very seldom be discovered.

A variety of medicines have been proposed for the cure of cancer in every part of the body. These are generally useless, and sometimes hurtful. The pretensions of empirics,

and the no less injurious interference of friends and acquaintances, who have all their own mode of cure, too often deceive the patient, and prevent her from using those simple but salutary means, which at first keep the disease in subjection; or from submitting to an operation, when the complaint is seated in a part, capable of being removed. The only time, when benefit can be derived, is thus lost, and nothing afterwards remains, but to diminish, as much as possible, the misery of the patient.

The early, or the incipient stage of this complaint, generally gives little trouble. It is not until the tumour has either, in the first place, acquired a considerable size, or presses on the neighbouring parts, or becomes more irritable, and acts as a source of irritation; or in the second place, has had an abscess formed in it, or gone the length of ulceration, that it produces material injury. We have perhaps no mean of entirely removing the schirrous part, that is, restoring it to a perfectly soft and healthy state. But as we cannot do this, the next object is, to restrain it from making progress, and keep it stationary, or perhaps diminish it somewhat.

Increase of size, or of irritability, implies activity of the part. Inflammation and ulceration, or abscess, which are the other

sources of mischief, also imply activity. The danger then, in every point of view, is lessened or prevented, by diminishing activity. This is done, by avoiding every thing which stimulates ; wine, and fermented liquors, and animal food, and exertion, as well as mental passions, are all injurious. The patient ought to refrain from much motion or fatigue, recline a good deal on a sofa, live chiefly on milk and vegetables, and drink whey as the common drink. This plan, of spare diet, may indeed be pushed too far, and produce one evil, by lessening another, but in general it agrees well, and the health, so far from suffering, is improved. Abstinence has, in some instances, been carried so far, as to restrict the patient to water, tea, &c. with very little bread, and by this plan, the tumour has not only been kept at bay, but has even been greatly lessened. In many cases, there may be a simple swelling in the womb, around the schirrous part, which would soon become also diseased, but by spare diet, &c. it may be removed, and thus, the general magnitude is diminished, although the part actually schirrous, is the same. Many indurations, which at first are not of a cancerous nature, and which are removeable by proper treatment, will, if allowed to continue, end in cancer.

The precise degree of abstinence, and the

length of time it is to be persisted in, must be determined by its effects on the constitution, and on the disease, which can only be judged of, by a professional person. There are circumstances and stages, in which this plan must be injurious, and it may be, at any stage, perhaps, pushed too far. It is however, highly unreasonable to blame this regimen, if it be injudiciously followed, or to argue from its abuse against its use. I can with confidence say, that in every instance, where the patient avoided stimulants, and lived abstemiously, she suffered less, and lived longer and more comfortably, than those who followed a contrary plan. Nevertheless, this is a point, which must be determined by the practitioner, for there may be cases, especially in the last stage, where cordials must be employed.

Besides employing the mildest diet, and avoiding stimulants, with a view of checking the progress of the disease, we also keep the bowels open, by the use of laxatives, such as phosphate of soda, citrate of soda, or Cheltenham salts, taken in small quantity, oftener or seldomer, according to the state of the bowels, and of the constitution.

Pain and irritation, which strongly tend to increase the disease, are allayed, by the use, every night, of the warm-bath, made with salt-

water. This soothes the part, and indeed the whole system, and contributes materially to the relief of the patient.

If there be marks of greater activity, and more irritation, namely, much and continued stinging pain, or heat in the back, and sense of fulness within, the application of leeches or cupping-glasses to the back, will be proper. The injection of decoction of chamomile flowers, into the passage, morning and evening, is always proper.

Discharges of blood, are moderated by rest, keeping the patient cool, and pressing a cloth firmly on the passage. Should the size of the tumour, render the passage of the stools or urine difficult, it will be necessary to assist the evacuation, of the former by laxatives, and to have the latter regularly drawn off. Care must however be taken, to give no stronger laxative, than is sufficient to produce the desired effect; for frequent stools in such circumstances, give great fatigue, and produce much injury.

Should there, in the last stage, be much pain or restlessness, these must be overcome by opiates. The foetid discharge is to be carefully washed away, and every attention must be paid to the mitigation of those evils and distresses, connected with protracted disease.

SECTION IV.

A MOLE is a fleshy or bloody substance, contained in the womb, and its size varies, from that of a nut, to an orange, or it may even become much larger. It is produced by the retention of a clot of blood in the womb, after a miscarriage, or profuse menstruation, or it may follow a delivery at the full time, or may be occasioned by the retention of a blighted conception.

With very few exceptions, indeed, this is a disease, to which married women alone are incident. The symptoms are very much the same at first, with those of pregnancy, so that this has been called a false conception. The menstrual discharge is obstructed, the breasts enlarge, the patient is sick in the morning, the appetite is fastidious, and the belly increases in size; it is however softer, and enlarges faster, than in pregnancy. Many of the symptoms may be occasioned by a polypus, but in that case, the breasts are flaccid, and the mouth of the womb is generally open, whereas, in the other complaint it is shut. Generally, the mole is expelled, before the usual time of quickening in pregnancy, but if it be retained longer, the size

of the belly does not increase in the same manner as in pregnancy, and no motion is felt. The mole is at length expelled, with the same symptoms as in a miscarriage, and it requires a similar management.

A substance of a different nature, is occasionally met with, namely, a mass, consisting of small bladders, called hydatids. These bladders, which contain water, may be very numerous, and somewhat resemble a thick cluster of grapes. Some of them are not larger, than the head of pins, others are larger than a nut, or one or two may even acquire a great size. Generally speaking, they are produced by the same causes which occasion a mole, but they usually proceed from the retention of a blighted conception, which comes to be converted into hydatids. In this last case, the time when the embryo, or foetus perishes, is marked by the breasts becoming flaccid, and the morning sickness going off. The belly does not increase in size, or if it do, it is slowly. The patient does not become regular, as she would have done, had the womb been emptied, but she may be subject to irregular discharges of blood. At length, after an uncertain period, pains like those of labour come on, and the mass is expelled, often with a very considerable flooding. The management is the same as in an abortion. After

the expulsion, milk sometimes appears in the breasts.

If hydatids are not occasioned by a conception, they are more frequently met with about the time, when the menstrual evacuation ceases, than earlier. This probably proceeds, from a retention of a clot of blood being most apt to take place then, the evacuation itself being more irregular, and more of the nature of a hemorrhage.

SECTION V.

THERE is attached to each side of the womb, though very loosely, a flat, glandular looking substance, not larger than a garden bean. This is called the ovarium, and it is liable to swell and become changed in its structure, containing a great many cells, filled with a fluid, like calves-feet-jelly, or sometimes like water. This disease has very improperly been called a dropsy of the ovarium. It very often seems to be excited by injury sustained in child-birth, but it may also occur without any evident cause, and attacks the married, and the unmarried, the young and the old. It begins slowly, and the ovarium for a length of time is not larger than a hen's egg. Then it increases, and by its pressure on the

bladder or bowels, it may interfere with the passage of the urine or stools, and it also is generally productive of universal irritation of the bowels, so that the patient is subject to indigestion, colic pain, and hysterical affections. Presently, the tumour can be felt like a ball in one side, and not unfrequently, the thigh or leg of that side, is numb, or subject to cramp. The tumour at first is moveable, but afterwards, it acquires such a size, as to render the belly tense, and it cannot be moved as formerly, nor its shape distinguished. It therefore, at this time, very much resembles dropsy, and indeed, after some time, it is usually complicated with dropsy. It gradually increases in bulk, and at last, the patient is much larger, than in the last month of pregnancy, and the diaphragm is pushed so much up, that she is very breathless. In the course of this disease, there are occasional attacks of pain in the belly, and as the size increases, the neighbouring parts suffer from pressure and irritation. The feet swell, the urine is diminished in quantity, the bowels are generally costive, the skin of the belly from distension, becomes very tender, the breathing difficult, the nights are spent without sleep, and at length, the constant uneasiness, and increasing weakness, end in death. The progress, however, which this disease

makes, is very variable. In some cases it continues slowly advancing for more than twenty years, during which, though the patient is not well, she yet is not very ill. In other instances, it arrives at a distressing degree in a year or two.

On the supposition, that this was a dropsy, it has been usual to employ diuretics, but from experience of their effects in my own practice, and in that of others, I can confidently say, that they have no power over the disease. They sometimes do decided mischief, by weakening the constitution, and therefore, I would never recommend them, unless this be complicated with ascites, or some other species of dropsy. The fluid is contained in a great many cells, or bags, and is out of the reach of medicine. It is only removed, by making an opening into the largest sac, and evacuating the fluid. This is sometimes done by nature, the cyst bursting into the bowels, and an immense quantity of foetid, dark coloured liquid, coming away by stool. This however, is a rare occurrence, and therefore, it is necessary to draw the fluid off by tapping, but this ought never to be done, till the tumour have acquired a great size, and produce breathlessness, and other urgent symptoms. The reason of this delay is, that the sac soon fills again, and

the renewal is productive of weakness. Every time the patient is tapped, the swelling returns with greater rapidity, so that the operation must be more quickly repeated. In one case, which has been published, the patient required to be tapped, no fewer than eighty times, and once had one hundred and eight English pints drawn off.

This disease can very rarely be cured. Our chief, and most rational object is, to keep it from increasing quickly. For this purpose, diuretics have been tried, but they have no effect. The best practice seems to be, to make gentle pressure externally, with a bandage, so as to support the parts, at the same time, that we keep the bowels open, and use means for invigorating the constitution. Troublesome symptoms, must be palliated, as they occur, by suitable remedies. This, it may be said, is inert practice, but I deem it better, to do little, where little can be done with advantage, than to do mischief with more active medicines, which, if they are not beneficial, must be productive of evil. I have long been of Dr. Hunter's opinion, that the patient will live longest, under this disease, who does least to get rid of it.

CHAPTER VII.

Of Sterility.

STERILITY is a misfortune, which few women become altogether reconciled to. In various countries, and in different ages of the world, charms and spells, and powerful elixirs, have been resorted to; rich offerings have been presented at the shrine of a favourite saint; pilgrimages have been undertaken to holy wells, and in addition to all, the virtues of potent herbs and drugs, have been made trial of, for the removal of this infirmity. When we consult the writings of the old physicians on this subject, we find numerous receipts, containing medicines, sometimes of opposite qualities, sometimes of no quality at all. The practice of the moderns, is at least more simple, if not more efficacious. Sterility proceeds from, either a temporary, or permanent, incapability of conceiving, or of retaining the

embryo, till it acquire a form. The causes producing this incapacity, may consist in some malformation or deficiency of the womb, or its appendages, which cannot always be discovered during life, or in merely a weakness of the action of the womb. This last is by far the most frequent cause, and it is occasioned by local weakness of the womb, or by general affections of the whole system, and is marked usually by an obstruction, deficiency, or redundancy of the menstrual evacuation, or by the complaint, termed female weakness. It is very rare indeed, for a woman to be barren, who is, in all respects regular.

We do not in the present age, pretend to the knowledge of any elixir or medicine, which has the specific power of curing sterility. We proceed on the principle of rectifying the constitution, where it is injured or weak, and of restoring the menstrual evacuation, to its due and healthy state. The means for effecting these purposes, must depend on the situation of the individual, and may be learned from some of the preceding chapters of this book.

There are chiefly two states of the constitution, productive of those deviations in the action of the womb, which cause barrenness. The first is a state of fulness, and disposi-

tion to obesity. The person gradually becomes fat and inactive, the menstrual evacuation continues regular for some time, but at last diminishes, and becomes obstructed, or it goes to the opposite extreme, and becomes frequent or profuse. The patient is either barren, or subject to false conceptions and abortion. This state is to be rectified, by spare or vegetable diet, total abstinence from malt liquor, regular, and constant exercise, especially early in the mornings, and on horseback, the prudent use of laxatives, and, after some time, the cold bath. These means will, if persisted in prudently, effect the desired change, but if pushed to an undue degree, and especially if repeated purgatives, and much vinegar, or great abstinence be resorted to, the health may be completely ruined.

The second state, is that of relaxation, the habit is spare, instead of corpulent, the mind is lively, and perhaps even irritable, the menstrual evacuation either profuse, or it recurs too frequently, and, at times, clots and shreds are discharged. This requires a different treatment: the diet, if not unusually nutritive, is at least not to be sparing, the exercise must not be carried the length of fatigue, the cold bath is useful, and strengthening medicines are required.

Such remedies, as I have pointed out for-

merly for the removal of irregularities of the menstrual evacuations, or of fluor albus, must be employed when necessary.

By persisting carefully in a proper plan, sterility may at length be frequently removed. There are many instances of women bearing children, after having been several years barren.

CHAPTER VIII.

Of Indigestion.

INDIGESTION is dependent on weakness, or diminished vigour of the stomach. This is productive of want of appetite, flatulence, acidity, heart-burn, hiccup, water-brash, fits of sickness and vomiting, headach, lassitude, unhealthy complexion, bad sleep, costiveness, turbid and high coloured urine, &c. Some modifications of this disease, are attended with vomiting of blood, or of bile, severe pain of

the stomach, or are connected with uneasiness in the right side, bloody coloured urine, pain in the top of the shoulder, yellow complexion, repeated fits of vomiting, &c.

Indigestion is caused by costiveness, by a sedentary life, by irregularities in diet, by depressing passions, &c. It is only the slighter degrees of this complaint, which can be managed with propriety, by a patient herself.

The bowels are to be kept open by the regular use of some laxative. This may be equally necessary, although the bowels be loose instead of bound, if the stools be dark coloured or offensive. One or more compound rhubarb pills, are to be taken every night, or we may occasionally substitute for these a little magnesia and rhubarb, with the addition of a small quantity of cinnamon, or canella alba. Aperient mineral waters, are likewise of approved efficacy. In England, Cheltenham, and in Scotland, Pitcaithly waters, are the most beneficial. No patient can expect to get well, without unremitting attention to the bowels. If the medicines I have mentioned are not effectual, the aloetic pill, may be safely substituted.

Regular exercise is to be taken every day, to such an extent, as can be borne without fatigue; and it will be of additional advantage

to contrive it, so that the mind shall be employed, at the same time.

The cold bath is of benefit in every case, where it does not produce pain in the head or stomach, or is not succeeded by chilness and languor.

The surface of the body, ought to be kept warm, by the use of flannel shifts and drawers, and woollen stockings.

The diet must be light, and in general, it will be useful to employ a considerable proportion of well boiled vegetables. Coffee is generally preferable to tea. New baked bread is always hurtful; warm toast is equally so. Long fasting is injurious, and therefore, the patient ought to eat frequently, though not much at once.

Nothing is more erroneous, than to suppose, that drams are necessary to digestion. The habitual use of cordials and drams after eating, is not only of no benefit towards digestion, but actually impairs it afterwards. All stimulants of this nature, occasion subsequent weakness, proportioned to the temporary excitement they produce. This is not the worst of the evil, for the exhilaration of spirit, and feeling of comfort, imparted for a time after taking cordials, comes to be a strong inducement for the patient to take them at other times, in order to remove

that languor and uneasiness, or those pains, which accompany indigestion. The consequence of which is, that gradually a habit of intemperance is induced, which ends in a bloated countenance, a diseased liver, a broken constitution, which terminates in a dropsy.

One or two glasses, of Madeira wine, after dinner, may be taken with safety and advantage, but malt liquor should be avoided. A little ginger ale, may be taken during dinner, or water alone may be used, which often agrees well with the stomach, if taken warm, and in small quantity. If it be necessary, on account of flatulence, to take any stimulant after eating, a little powdered ginger is the safest.

Besides this regimen, it may also be necessary, to employ some strengthening medicine, to invigorate the stomach, such as twenty drops of tincture of steel, in a glass of water, three or four times a day. Or five grains of colomba, and the same quantity of magnesia, with two grains of ginger, three times a day.

Pain in the stomach, vomiting of blood, &c. though greatly relieved by purgative medicines, are too serious, to be entrusted to the management of the patient alone.

Deficiency, or irregularity of the bilious secretion, with pain in the bowels, or swelling of the feet, a state not uncommon in indigestion, or about the time when the menstrual discharge ceases, will require mercurial preparations, in the form of pill.

CHAPTER IX.

Of Hysteria.

IN a well marked hysterical fit, a sense of pain or fulness is felt in the belly, near the navel, or towards the left side. This gradually spreads, and a sensation is felt, as if a ball passed upwards, and stuck in the throat. The patient now usually falls down insensible, or convulsed, and seems to suffer much in breathing, sobbing violently, or uttering a kind of shriek. She is generally pale, and frequently, apparently insensible during a great part of the fit, or seems to be in a faint; but when she recovers, she is not only con-

scious of having been ill, but also of many circumstances which occurred during the fit. After remaining for a considerable time, in a state of muscular agitation, alternating with an appearance of fainting, the affection abates. She utters deep sighs, opens her eyes, and looks around her, as if surprised, and at length, recovers both composure and sensibility, but remains for some time languid, and complains of headach. This restoration is accompanied with eructation, and the discharge of a quantity of limpid urine. The duration of the fit, as well as the circumstances attending it, vary much. In some instances, it lasts only a few minutes; in others, for more than an hour. Sometimes there is great muscular agitation, or pretty strong convulsions; at other times, the fit resembles more a faint. In some instances, violent paroxysms of crying and laughing, alternate with each other, whilst in many cases, these symptoms are entirely absent.

These hysterical fits, depend on a peculiar irritability of the system, which is always greatest at the menstrual period, and therefore, at that time, women are peculiarly liable to hysteria. A torpid, or bad state of the bowels, also powerfully disposes to this disease. Under such circumstances, any great or sudden passion of the mind, joy, fear, a

surprise, exposure to much heat, great fatigue, &c. will immediately bring on a fit.

The treatment during the fit, is briefly this. Let the patient be laid immediately either in bed, or on a sofa, and if the room be warm, let the door, or part of a window, be opened. Volatile salts may be held to the nose, and the temples rubbed with lavender water. As soon as the patient can swallow, a tea-spoonful of volatile tincture of valerian, in a little water, may be given, or the same quantity of compound spirit of lavender, alone, or with twenty drops of laudanum. If none of these medicines can be procured, forty drops of hartshorn, may be given in a little water, especially if the patient be languid, and apparently faintish. In slight cases, time alone, and soothing the patient, and keeping her at rest, will be sufficient. But where the agitation is extreme, forty drops of laudanum may be required to calm her, and if she can swallow easily, a tea-spoonful of ether should be given in a glass of cold water. But this is not to be proposed, without previously trying, whether she can readily swallow something milder, as it is so sharp and volatile, that it might otherwise, by getting into the upper part of the wind-pipe, produce disagreeable effects. After she recovers, it is of service to administer a purgative.

A recurrence of fits, in those who are subject to them, is to be prevented, by rectifying the state of the constitution, which predisposes to them. Where the patient is of a full habit, florid, or robust, the diet ought to be somewhat sparing, and of the mildest kind; all high seasoned dishes, and much animal food, or wine, being injurious. Regular and considerable exercise, is also to be taken. Those, on the other hand, who are of a slender habit, debilitated by previous disease, or naturally feeble and delicate in constitution, require a more generous diet, though still the nutriment must be light, and easily digested. Strengthening medicines, such as tincture of steel, &c. will be required, and the cold bath will be useful. In both cases, however, it is of the utmost importance, to attend to the state of the bowels, using such a number of aloetic pills daily, as is necessary to expel all the dark coloured, offensive feculent matter, and afterwards to support the due and vigorous action of the bowels. Dr. Camper, and other practical physicians, long ago proposed very powerful purgatives as a mean of cure; and of late, the attention of the profession has been directed to this point with great advantage, by Dr. J. Hamilton senior. Although at first sight it would appear, to be a matter of little moment, what laxative be employed,

yet, from careful observation, I am convinced, that the aloetic pills, recommended by Dr. H. claim in general, a decided preference to other medicines.

In all those cases, where the menstrual evacuation is profuse, or obstructed, or otherwise irregular, suitable means must be employed for bringing it into a proper condition.

When, from the sensation of the patient herself, or from other circumstances, the approach of a fit is apprehended, it may often be checked, by immersing the feet in tepid water, and taking a tea-spoonful of aromatic spirit of hartshorn, in a little cinnamon water.

But besides the regular hysterical paroxysm, women are subject to other affections of a nervous nature, such as palpitation of the heart, breathlessness, feeling of suffocation, stupor, severe and painful spasms, fits of general irritability of the body and mind, &c. The particular treatment, of these various symptoms, must vary according to their violence, and the peculiar constitution of the patient. It is evident therefore, that this cannot be minutely explained here. In some cases, blood-letting is required, especially when there is some very urgent affection of the organs of respiration, or violent and ob-

stinate pain. But in general, pain is relieved by opiates, and the application of a piece of flannel, spread with mustard. Opiates indeed, are generally useful, and in many of the cases I have mentioned, are the most powerful remedies. It may however, be necessary to conjoin them with camphor, valerian, asafoetida, or other antispasmodics.

In order to prevent the repetition of these symptoms, it is in general necessary to have recourse to the strengthening system, along with the use of valerian, and other antispasmodic medicines, but particularly to the regular use of laxatives, which sometimes fail in their good effect, from not being sufficiently strong.

It sometimes happens, that hysterical or nervous affections, put on the appearance of much more dangerous diseases, or produce symptoms, at first, highly alarming. It is not always easy, even for a practitioner of the greatest experience, to form an accurate judgement, far less could this be done, by the reader, from any instruction I could deliver here. In every such case, it is most prudent to call timely aid. I may only observe, for the satisfaction of relations, that the patient expressing great apprehension, and fear of dying, is far from being an unfavourable sign, as it generally attends nervous affec-

tions. This impression is sometimes so violent, as even to constitute a species of delirium. It cannot be removed by reasoning, but it may be greatly increased by mistaken sympathy. It is of importance, to subdue this, as much as possible, because, if indulged, it aggravates the disease, renders it more obstinate, and may ultimately be productive of a very distressing degree of melancholy. Cheerful company, and change of scene, are of great benefit when this impression continues long, or returns frequently. Indeed, in most nervous diseases, travelling, or frequent removal from one place to another, contributes greatly to the cure.

FINIS.





